San Joaquin Valley Drainage Authority

Westside San Joaquin River Watershed Coalition

Semi-Annual Monitoring Report

2013/2014 Non-Irrigation Season Report

Covering the period: September 2013 through February 2014
(Sampling Events 106 through 110, including Rain Event 14)

June 15, 2014

Prepared by:
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June 11, 2014

Pamela Creedon, Executive Officer
Central Valley Regional Water Quality Control Board
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Subject: Westside San Joaquin River Watershed Coalition
Submittal of June 15, 2014 Semi-annual Monitoring Report

Dear Pamela,

Attached is the June 15, 2014 semi-annual monitoring report as required under our Monitoring and Reporting Program Order No. R5-2008-0831 (as revised by letter dated 3/9/12). This report covers the non-irrigation season monitoring from September 2013 through February 2014.

Laboratory reports associated with this monitoring period are included electronically (CD-ROM) as Appendix C, along with associated electronic data deliverables (EDDs). Hard copies of the laboratory reports can be provided upon request.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel or represented members properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for violations.

If you should have any questions on the information submitted in this report, please give me a call directly at 559-582-9237.

Joseph C. McGahan
Watershed Coordinator
Westside San Joaquin River Watershed Coalition

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SEMI-ANNUAL MONITORING REPORT REQUIRED COMPONENTS

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1	Signed Transmittal Letter	Attached
2	Title Page	Cover
3	Table of Contents	Table of Contents
4	Executive Summary	Section 1
5	Description of the Coalition Group Geographical Area	Section 2
6	Monitoring Objectives and Design	Section 2
7	Site Descriptions and Rainfall Records	Sections 3 & 4
8	Location Map	Section 4
9	Tabulation of Analytical Results	Appendix A
10	Discussion of Data	Sections 3, 4, 6, 8, & 9, Attachments 1, & 2
11	SWAMP Comparable EDD	Appendix C
12	Sampling and Analytical Methods	Sections 2, 5, & 7
13	Copies of Chain of Custody Sheets	Appendix A
14	Field Data sheets, Laboratory Reports, Laboratory Raw Data	Appendix C
15	Laboratory and Field Quality Control Results	Section 6, Attachment 3, Appendix D
16	Summary of Quality Assurance Evaluation Results	Section 6, Appendix D
17	Method Used to Obtain Flow	Section 6
18	Monitoring Site and Event Photos	Appendix D
19	Summary of Exceedances and Related Pesticide Use Information	Sections 4, 8, Attachments 2 & 5, & Appendix B
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SECTION 1: EXECUTIVE SUMMARY

This report covers the 2013/2014 non-irrigation season sampling events beginning September 2013 through February 2014 (Event 106 through Event 110 and Rain Event 14). Nineteen of the twenty two monitoring sites within the Westside San Joaquin River Watershed Coalition (Westside Coalition) are located on streams that are dominated by summer agricultural drainage runoff and are often dry or have little flow outside of the irrigation season.

The 2013/14 non-irrigation season was classified as a critical hydrologic year type for the west-side of the San Joaquin Valley and Federal water districts were limited to 20% of federal water contract allocation. There were few significant storms during the fall and winter and one rain event sample was collected (2/10/14). See **Section 3** for a discussion of measured rainfall. Non-irrigation season monitoring samples were collected at all sites containing sufficient water in accordance with the Westside Coalition's Monitoring and Reporting Plan[1] (MRP). Scheduled sediment samples were collected in September 2013; sediment toxicity was observed at Del Puerto Creek at Hwy 33, Hospital Creek, Ingram Creek, Los Banos Creek at China Camp Road, and Westley Wasteway; three of the five sediment samples were tested for selected pesticides. See **Sections 8** and **9.**

Attachment 1 details the samples collected at each site during each sampling event. A summary of the monitoring results is presented in **Appendix A**. Because there is not significant agricultural activity during the non-irrigation season, aquatic toxicity samples are collected monthly at only four of the monitoring sites (San Joaquin River and Salt Slough at Lander Avenue, Mud Slough upstream of the San Luis Drain, and Los Banos Creek at Highway 140) and at all flowing sites during rain events. During the report period, significant aquatic toxicity was measured only once for algae, summarized in **Table 1** below.

Table 1: Summary of Toxicity

Event	Site	Species Survival as a Percentage of Control Growth
Rain Event 14 (Feb.)	Salt Slough at Sand Dam	*Selenastrum* – 43%

These results, along with associated follow up testing, water quality and flow data, are summarized in **Attachment 2**. Details of the aquatic toxicity analyses are included in **Appendix C**.

Quality control samples were collected in addition to the event analysis sample. The quality control samples included field blanks, field duplicates, laboratory blanks and spike, and matrix spike/matrix spike duplicate samples (MS/MSD).

There were a handful of minor quality control issues, including exceedance of the field duplicate relative percent difference (RPD) value, and surrogate, matrix spike, or laboratory spike recoveries outside of the expected range. None of these issues are expected to affect data usability. Results of the Field Quality Control samples are discussed in **Section 6** and **Attachment 3**. A review of laboratory quality assurance activities is included in **Appendix D**.

[1] MRP Order No. R5-2008-0831

Table 2 lists the sites that were sampled during the 2013/14 non-irrigation season.

Table 2: Collected Samples September 2013 through February 2014.

Map Designation	Monitoring Site	Event 106		Event 107	Event 108	Event 109	Event 110	Event R14
	Discharge Sites	September		October	November	December	January	February
1	Hospital Cr at River Road	NP	SS	NP	NP	NP	NP	NF
2	Ingram Cr at River Road	S	SS	S	NF	NF	NF	NF
3	Westley Wasteway near Cox Road	S	SS	S	S	S	S	NF
4	Del Puerto Cr near Cox Road	S	SS	S	S	S	S	S
5	Del Puerto Cr at Hwy 33	NP	SS	NP	NP	NP	NP	NF
7	Ramona Lake near Fig Avenue	S	SS	S	S	S	S	NF
8	Marshall Road Drain near River Road	S	NP	S	S	S	S	NF
9	Orestimba Cr at River Road	NF	NF	S	NF	NF	NF	NF
10	Orestimba Cr at Hwy 33	NP	NA	NP	NP	NP	NP	S
11	Newman Wasteway near Hills Ferry Road	NA	NA	S	S	S	S	S
13	San Joaquin River at Lander Avenue	S	NP	S	S	S	S	S
14	Mud Slough u/s San Luis Drain	S	NP	S	S	S	S	S
15	Salt Slough at Lander Avenue	S	NP	S	S	S	S	S
16	Salt Slough at Sand Dam	NP	SS	NP	NP	NP	NP	S
17	Los Banos Creek at Highway 140	S	NP	S	S	S	S	S
18	Los Banos Creek at China Camp Road	S	SS	S	S	S	S	S
19	Turner Slough near Edminster Road	S	NP	S	S	S	S	S
20	Blewett Drain near Highway 132	S	SS	S	NF	NF	S	NF
21	Poso Slough at Indiana Avenue	S	SS	S	S	S	S	S
	Source Water Sites							
12	San Joaquin River at Sack Dam	S	NP	S	S	S	S	S
22	San Joaquin River at PID Pumps	S	NP	S	S	S	S	S
23	Delta Mendota Canal at Del Puerto WD	S	NP	S	S	S	S	S

Notes: S = Water sampled according to the MRP.
SS = Sediment sampled according to the MRP.
NA = Not sampled due to lack of safe access.
NF = Not sampled due to lack of flow.
NP = Not included in the sampling plan.
NS = Not sampled - sample missed.

SECTION 2: COALITION AND MONITORING PROGRAM DESCRIPTION

In June, 2003, the San Joaquin Valley Drainage Authority (SJVDA) submitted a Conditional Waiver Report for the Westside San Joaquin River Watershed Coalition (Westside Coalition). The Westside Coalition watershed generally lies on the west-side of the San Joaquin River from approximately the Stanislaus River on the north to 10 miles south of Mendota and encompasses an area of approximately 460,500 acres. There are approximately 4,000 landowners and 1,500 operators within the watershed. Most of the watershed receives water supplies from the Central Valley Project, while certain areas receive water from the State Water Project. In addition, some areas receive supplies from the San Joaquin River and local water sources, one area receives a Kings River supply, and some areas receive water from groundwater wells. The Delta-Mendota Canal and San Luis Canal run through the watershed. Water deliveries are made to Federal Central Valley Project Contractors and to San Joaquin River Exchange Contractors from these facilities. State water deliveries are also made to one area.

The Grassland Drainage Area encompasses 97,400 acres that are geographically within the watershed. The Grassland Drainage Area is covered under waste discharge requirements (No. 5-01-234), which regulates the discharge of subsurface drainage water through the San Luis Drain to the San Joaquin River. Tailwater is aggressively controlled and not allowed to discharge from

the region. The area coordinates a separate monitoring and reporting program under the above waste discharge requirements.

The Westside Coalition area also includes federal, state and private managed wetlands. These areas share water delivery and drainage conveyance systems with the surrounding agricultural areas. Due to the integrated nature of the water facilities the managed wetlands have joined the Westside Coalition as a wetland sub-watershed participant to comply with the Conditional Waiver to effectively and efficiently address water quality issues. The effects of discharges from the wetland areas are covered in this monitoring program.

The communities of Grayson, Westley, Vernalis, Crows Landing, Patterson, Newman, Gustine, Stevinson, Los Banos, Dos Palos, South Dos Palos, Firebaugh, Mendota and Tranquillity lie within the geographic area of the Westside Coalition. These communities do not have discharges from irrigated lands and are not included in the Westside Coalition, but contribute storm waters and municipal waste waters to the watershed and may impact discharges from irrigated lands.

Interstate Highway 5, State Highways 33, 140, 165 and 152 and many county roads run through the geographic area of the Westside Watershed. Storm water discharges from these roads and highways can contribute contaminants to the same water bodies that carry agricultural return water.

The San Joaquin Valley Drainage Authority, a joint powers agency, is the umbrella organization for the Westside Coalition for purposes of the Waste Discharge Requirements General Order for Growers within the Western San Joaquin River Watershed (Order No.R5-2014-002). On July 30, 2004, the Westside Coalition received approval for its irrigated agricultural monitoring plan from the Central Valley Regional Water Quality Control Board. The first sampling event took place on July 6, 2004, with subsequent event samples collected monthly. In February, 2008, the Westside Coalition received approval for a revised Monitoring and Reporting Plan (Revised MRP). The Revised MRP was designed to focus monitoring efforts at sites with known water or sediment issues and to support the Management Plan issues. The Revised MRP was implemented in March of 2008. Monitoring and Reporting Program Order No. R5-2008-0831 (MRP Order or MRP) was issued by the Regional Board in September 2008. This order was largely reflective of the Revised MRP and took effect in March 2009, modified after the 2011/12 assessment period. See **Attachment 7**.

The MRP Order includes a targeted monthly sampling plan for 22 monitoring sites within the Coalition area as well as plans for sampling for two rain events during each year. The monitoring sites include three source water sites and 19 sites that discharge agricultural drain water. Four of the discharge sites are within San Luis Water District, which maintains a tailwater discharge prohibition. These sites generally only discharge during severe storm events.

During any given sampling event, each accessible site is visited, visually assessed, and samples are collected in accordance with the field sampling manual. See **Table 2.**

The objectives of the original monitoring program are:

- To assess the existing water quality characteristics of major agricultural drains within the watershed area.

- To determine the location and magnitude of water quality problems.
- To determine the cause of water quality problems and develop solutions.

Two sampling crews have been trained by the analytical laboratories to collect samples according to the Westside Coalition's QAPP and Field Sampling Manual. These crews are responsible for collecting samples at each of the 22 sites; the field coordinator for the northerly region is responsible for collecting samples north of Newman Wasteway. The field coordinator for the southerly region is responsible for collecting samples south of (and including) Newman Wasteway. The sampling responsibilities include completion of the field data sheets, collection of water and sediment samples, completion of labels and chain of custody sheets, and coordination with the labs for sample pickup. The parameters analyzed at each site are shown in **Table 3**. The laboratory, method, and constituent groups analyzed are shown in **Table 4** and a list of specific analytes is included in **Attachment 7**.

Table 3: Monitoring Stations and Samples

		2013/14 Non-Irrigation Season		
		Irrigation	Non-Irrigation	Rain Event
Monitoring Site	Site Code	(Mar-Aug)*	(Sep-Feb)*	(2x per year)
Discharge Sites				
Blewett Drain at Highway 132	VH132	Special	Core	Rain**
Poso Slough at Indiana Avenue	PSAIA	Special	Core	Rain**
Hospital Cr at River Road	HCARR	Special	-	Rain**
Ingram Cr at River Road	ICARR	Core + Special	Core	Rain**
Westley Wasteway near Cox Road	WWNCR	Core + Special	Core	Rain**
Del Puerto Cr near Cox Road	DPCCR	Core + Special	Core	Rain**
Del Puerto Cr at Hwy 33	DPCHW	Special	-	Rain**
Ramona Lake near Fig Avenue	ROLFA	Core + Special	Core	Rain**
Marshall Road Drain near River Road	MRDRR	Core + Special	Core	Rain**
Orestimba Cr at River Road	OCARR	Core + Special	Core	Rain**
Orestimba Cr at Hwy 33	OCAHW	Special	-	Rain**
Newman Wasteway near Hills Ferry Road	NWHFR	Core + Special	Core	Rain**
San Joaquin River at Lander Avenue	SJRLA	Core + Special	Core + Special	Rain**
Mud Slough u/s San Luis Drain	MSUSL	Core + Special	Core + Special	Rain**
Salt Slough at Lander Avenue	SSALA	Core + Special	Core + Special	Rain**
Salt Slough at Sand Dam	SSASD	Special	-	Rain**
Los Banos Creek at Highway 140	LBCHW	Core + Special	Core + Special	Rain**
Los Banos Creek at China Camp Road	LBCCC	Core + Special	Core	Rain**
Turner Slough near Edminster Road	TSAER	Core + Special	Core	Rain**
Source Water Sites				
San Joaquin River at Sack Dam	SJRSD	Source	Source	Source
Delta Mendota Canal at Del Puerto WD	DMCDP	Source	Source	Source
San Joaquin River at PID Pumps	SJRPP	Source	Source	Source

Table 4: Analytes, Laboratories, and Methods

	Constituent	Laboratory	Method	Units	Laboratory SOP No.
Field Data	pH	Field Crew	YSI meter	-	Field Manual
	Temperature	Field Crew	YSI meter	ºC	Field Manual
	Conductivity	Field Crew	YSI meter	µmhos/cm	Field Manual
	Dissolved Oxygen	Field Crew	YSI meter	mg/L	Field Manual
	Flow	Field Crew	Estimate	cfs	Field Manual
Gen. Phy. / D.W.	Color (A.P.H.A.)	Caltest	SM 2120B	-	COLOR-rev4E
	pH	Caltest	SM 4500-H+B	-	PH-rev4
	TDS	Caltest	SM 2540C	mg/L	TDS-rev4E
	TSS	Caltest	SM 2540D	mg/L	TSS-rev4
	Turbidity	Caltest	SM 2130B	NTU	TURB-rev4E
	Hardness	Caltest	EPA 130.2	mg/L	HARD-rev5E
	Metals	Caltest	EPA 200.7, 200.8	mg/L	M-ICP-rev10E & 2008rev5Ea
	Bromide/Nitrate	Caltest	EPA 300.0	mg/L	DIONEX-rev5E
	Nitrogen, Nitrite	Caltest	EPA 354.1	mg/L	NO2-rev6
	TKN	Caltest	EPA 351.3	mg/L	NH3-TKN-rev6E
	Phosphate	Caltest	EPA 365.2	mg/L	PHOS-rev4
	Ammonia (as N)	Caltest	EPA 350.2	mg/L	NH3-TKN-rev6E
	DOC	Caltest	SM 5310-B/C	mg/L	TOC-D0C-rev7E
	TOC	Caltest	SM 5310-B/C	mg/L	TOC-D0C-rev7E
	Fecal coliform	Caltest	SM20-9221B/E	mpn/100ml	MMOMUG-rev8E
	E. Coli	Caltest	SM 9221BF/9223-B	mpn/100ml	MMOMUG-rev8E
Pesticides	Organophosphates	APPL	EPA 8141A	µg/L	ANA8141A
	Organochlorines	APPL	8081A/8082	µg/L	ANA8081A
	Carbamates	APPL	EPA 8321A LL	µg/L	HPL8321A
	Herbicides	APPL	EPA 8141A	µg/L	ANA8151A
Sediment	Organochlorine	Caltest	SW846 8081	mg/kg (dry)	8081rev8
	Pyrethroid	Caltest	SW846 8270(SIM)	mg/kg (dry)	Pyrethroidsrev4a
	% Solids	Caltest	EPA 160.3	%	Residue-rev6
	TOC	Caltest	EPA 9060A	%	WalkleyBlack TOC
Toxicity	*Ceriodaphnia d.*	PER	EPA-821-R-02-012	% survival	Acute Cerio SOP
	Selenastrum c.	PER	EPA-821-R-02-013 & EPA-600-4-91-002	cell growth	Chronic Selenastrum SOP
	Pimephales p.	PER	EPA-821-R-02-012	% survival	Acute FHM SOP
	Hyalella a.	PER	EPA-600-R-99-064	% survival	10-D HyalellaAcuteSedTest

Caltest Labs in Napa, California
APPL Labs in Fresno, California
Pacific EcoRisk (PER) in Fairfield, California

Aquatic toxicity samples were collected and analyzed by Pacific EcoRisk, Inc. using the methods described below:

- *Ceriodaphnia dubia*: "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (USEPA 2002a).
- *Pimephales promelas*: "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (USEPA 2002a).
- *Selenastrum capricornutum*: "Short-term Methods for Estimated the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms" (USEPA 2002b).
- *Hyalella azteca*: "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Organisms" (USEPA 2000).

SECTION 3: MONITORING EVENT SUMMARIES

Monitoring Event Summaries.
In accordance with the MRP order, non-irrigation season monitoring was implemented at all discharge sites beginning in September 2013. Each site was visited monthly during the reporting period and samples were collected from every site with sufficient water to submerge and fill a sample container.

Three CIMIS[2] stations were monitored by the Westside Coalition for rainfall: Patterson, Los Banos, and Firebaugh. **Table 5** summarizes the monthly rainfall measured at each station.

Table 5: Monthly Rainfall in Inches

Month	Patterson	Los Banos	Firebaugh
September	0.02	0.02	0.15
October	0.00	0.02	0.29
November	0.88	0.21	0.52
December	0.22	0.26	0.22
January	0.20	0.18	0.19
February	3.01	1.78	1.35
Report Period Total:	4.25	2.47	2.72

Rainfall during the 2013/14 non-irrigation season was significantly below normal and the 2013/14 water year type has been classified as a Critical year type. Federal water allocations through the Central Valley Project have been set at 0% for the 2014 irrigation season.

Event 106, September 9th and 10th, 2013.
Non-irrigation season water samples were collected at 13 discharge sites and 3 source water sites on September 10th in accordance with the Westside Coalition MRP. There was insufficient flow for sample collection at Orestimba Creek at River Road; dense weedy growth prohibited sample collection at the Newman Wasteway near Hills Ferry Road site as well. Aquatic toxicity was tested for algae, and invertebrates in accordance with the Monitoring Order (see **Attachment 7**) at four sites and no toxicity was observed. Sediment samples were collected at 10 monitoring sites on September 9th. There was insufficient flow for sample collection at Orestimba Creek at River Road; the Orestimba Creek at Hwy 33 site was inundated by a beaver dam and could not be sampled; dense weedy growth prohibited sample collection at the Newman Wasteway near Hills Ferry Road as well. Five of the sites tested positive for toxicity; significant toxicity was observed in the Del Puerto Creek at Hwy 33 (58.8% survival) sample, the Hospital Creek sample (0.0% survival), the Ingram Creek sample (0.0% survival), the Los Banos Creek at China Camp Road (80% survival), and the Westley Wasteway sample (2.5% survival). Sediment from these four samples were sent to Caltest Laboratories for pesticide analysis. In all four sediment samples, pesticides were present in sufficient concentration to have caused the observed toxicity. See **Section 8** and **Attachment 4**.

[2] California Irrigation Management Information System, http://wwwcimis.water.ca.gov/cimis/welcome.jsp
CIMIS Site Designations: Patterson – 161; Los Banos – 056; Firebaugh/Telles – 007

Event 107, October 8th, 2013.
Non-irrigation season ambient water samples were collected at 15 discharge sites and source water samples were collected at 3 sites. Aquatic toxicity samples were collected at four sites and no toxicity was observed.

Event 108, November 12th, 2013.
Non-irrigation season ambient water samples were collected at 12 monitoring sites and 3 source water sites. There was insufficient flow for sample collection at Blewett Drain, Ingram Creek, and Orestimba Creek at River Road. Aquatic toxicity samples were collected at four sites and no toxicity was observed.

Event 109, December 10th, 2013.
Non-irrigation season ambient water samples were collected at 12 monitoring sites and 3 source water sites in accordance with the Westside Coalition's MRP. There was insufficient flow for sample collection at Blewett Drain, Ingram Creek, and Orestimba Creek at River Road. Aquatic toxicity samples were collected at four sites and no toxicity was observed.

Event 110, January 14th, 2014.
Non-irrigation season water samples were collected at 13 discharge sites and 3 source water sites. There was insufficient flow at the Ingram Creek, and Orestimba Creek at River Road sites. Aquatic toxicity samples were collected at four sites and no aquatic toxicity was observed in any of the samples.

Rain Event 14, February 10th, 2014.
Rain Event Samples were collected at 11 discharge sites and 3 source water sites in accordance with the MRP. There was insufficient flow to collect samples at Blewett Drain, Hospital Creek, Ingram Creek, and Westley Wasteway, as well as the Del Puerto Creek at Hwy 33, Ramona Lake, Marshall Road Drain, and Orestimba Creek at River Road sites. Diuron (5.6 µg/L), and Dimethoate (1.3 µg/L) were detected in the Salt Slough at Sand Dam sample and Diuron (2.2 µg/L) was detected in the Delta Mendota Canal at DPWD site.

Aquatic toxicity for all three indicator species was tested for on all 11 discharge site samples and the 3 source water samples as well. Aquatic toxicity to algae was observed in the Salt Slough at Sand Dam sample (43% of control growth). Since the sample met the threshold for follow-up analysis (≥50% reduction in growth), a TIE was performed; toxicity was not persistent in the Baseline (untreated) treatment for the Salt Slough sample. These results suggest that the toxicant (or toxicants) responsible for the toxicity were susceptible to rapid degradation. As a result, interpretation of the TIE results is not possible. Diuron is the likely cause of the toxicity.

SECTION 4: SAMPLING SITE AND WATERSHED DESCRIPTIONS

Figure 1 shows the Westside Coalition area and the location of the monitoring sites. Following is a description and rationale for the monitoring sites.

- Blewett Drain near Highway 132 (originally called Vernalis at Highway 132 [VH132]). This site is located at the northerly boundary of the Westside Coalition. The cropping

pattern for discharges into this drain is similar to that of Hospital Creek. Flow at this site is calculated as an estimated velocity and measured flow area. The Westside Coalition began monitoring this site in 2008.

- Poso Slough at Indiana Avenue (PSAIA). This site is located on Poso Slough near the boundary between San Luis Canal Company and Central California Irrigation District in the Dos Palos Subarea of the Westside Coalition. Flow at this site is calculated as an estimated velocity and measured flow area. The Westside Coalition began monitoring this site in 2008. Poso Slough is a tributary to Salt Slough, discharging upstream of the Sand Dam monitoring site.
- Hospital Creek at River Road (HCARR). This site is a significant drainage for the Patterson Subarea of the Westside Coalition and has been monitored since July 2004 for a variety of constituents. Sediment discharge, sediment toxicity, aquatic toxicity (water flea), and pesticides have been measured at this site. It is on the 303(d) list for pesticides. Flow at this site is measured by a rectangular weir.
- Ingram Creek at River Road (ICARR). This site is a significant drainage for the Patterson Subarea of the Westside Coalition and has been monitored since July 2004 for a variety of constituents. Sediment discharge, sediment toxicity, aquatic toxicity (water flea), and pesticides have been measured at this site. It is on the 303(d) list for pesticides. Flow at this site is measured by a rectangular weir.
- Westley Wasteway near Cox Road (WWNCR). Westley Wasteway is a significant drainage for the Patterson Subarea for both tailwater and storm runoff. Land use upstream of this monitoring station is similar to that of Del Puerto Creek. This site has been monitored for a variety of constituents since 2004. Sediment discharge, sediment toxicity, aquatic toxicity (water flea), and pesticides have been measured at this site. Flow at this site is measured by a rectangular weir.
- Del Puerto Creek near Cox Road (DPCCR) and Del Puerto Creek near Highway 33 (DPCHW). Del Puerto Creek is on the 303(d) list for pesticides and is a major drainage for the Patterson Subarea and major storm runoff collector. Two stations are identified on this water-body; one near the discharge to the San Joaquin River, and one at Highway 33, near the middle of the Patterson Subarea. Biological assessments are performed on Del Puerto Creek to assess its overall health, which will be useful in relating to collected water quality data. Both of these sites have been monitored for a variety of constituents since 2004. Sediment discharge, sediment toxicity, aquatic toxicity (water flea), and pesticides have been measured at both sites. At the Highway 33, flow is estimated using the float method. A beaver dam has been constructed (by a beaver) downstream of the Cox Road site, creating a backwater that prevents safe flow measurement at the site. The Coalition is considering options to address this issue.
- Ramona Lake near Fig Avenue (ROLFA). This site monitors discharge from a small lake as it flows into the San Joaquin River. Agricultural and storm runoff from the Patterson Subarea can discharge into the lake. This site has been monitored for a variety of constituents since 2004. Some pesticides have been measured at this site.
- Marshall Road Drain near River Road (MRDRR). This site monitors a pipe drain that carries agricultural and storm runoff from the Patterson Subarea of the Westside Coalition. This site has been monitored for a variety of constituents since 2004. Some pesticides and aquatic toxicity have been measured at this site. Flow from this site is measured by a weir

within the pipe. During periods of high flow, the weir can become submerged and incapable of measuring flow.

- Orestimba Creek at River Road (OCARR) and Highway 33 (OCAHW). There are two monitoring locations on Orestimba Creek; one near the discharge point to the San Joaquin River; and one upstream at Highway 33. Orestimba Creek is similar to that of Del Puerto in both the surrounding landscape and discharged water quality. It is on the 303(d) list for pesticides, is a major drainage for the Patterson Subarea, and is included in the biological assessment portion of the monitoring program. Pesticides, sediment discharge, sediment toxicity, and aquatic toxicity have been measured at these sites. USGS monitors and reports flow at Orestimba Creek at River Road. Flow at Orestimba Creek at Highway 33 is calculated through an estimated velocity and cross-sectional flow area.
- Newman Wasteway near Hills Ferry Road (NWHFR). The Newman Wasteway is a significant drainage for the Patterson Subarea and is on the 303(d) list for salt and pesticides. This site measures drainage that originates from the southerly region of the Patterson Subarea, and has been monitored for a variety of constituents since 2004. Pesticides, sediment discharge, sediment toxicity, and aquatic toxicity have been measured at this site. Flow at this site is calculated through an estimated velocity and cross-sectional flow area.
- The San Joaquin River at Lander Avenue (SJRLA). This site is both a receiving water-body for agricultural and storm drainage and a source water for districts that pump from the San Joaquin River. It also receives drainage flows from irrigated wetlands in the fall and winter months. It has been monitored for a variety of constituents since 2004, and pesticides, sediment toxicity, and aquatic toxicity have been measured. Flow at this site is reported by a nearby CDEC station.
- Mud Slough upstream of the San Luis Drain (MSUSL). This site measures drainage originating from the Dos Palos and Los Banos Subareas that flow through the wetlands as well as the wetlands themselves. Mud Slough is on the 303(d) list for a variety of constituents. In addition to the Westside Coalition's monitoring program, the Central Valley Regional Water Quality Control Board, Surface Water Ambient Monitoring Program (SWAMP) collects and analyzes samples from this site throughout the year. These samples are analyzed for selenium, boron, and EC, along with other constituents. Flow at this site is calculated as the difference between the flow downstream of the San Luis Drain (reported by CDEC) and the measured San Luis Drain Discharge. The SWAMP Data is available via the internet at:
  http://www.waterboards.ca.gov/centralvalley/programs/agunit/swamp/index.html.
- Salt Slough at Lander Avenue (SSALA) Salt Slough at Lander Avenue measures agricultural, storm, and wetland runoff from the Dos Palos and Los Banos Subareas, and has been monitored (and 303(d) listed) for a variety of constituents since 2004. In addition to the Westside Coalition's monitoring program, the Central Valley Regional Water Quality Control Board, SWAMP collects and analyzes samples from this site throughout the year. These samples are analyzed for selenium, boron, and EC, along with other constituents. Flow at this site is reported by CDEC. The SWAMP Data is available via the internet at:
  http://www.waterboards.ca.gov/centralvalley/programs/agunit/swamp/index.html.
- Salt Slough at Sand Dam (SSASD). This site is upstream of the Lander Avenue site and measures agricultural and storm drainage originating in portions of the Dos Palos Subarea.

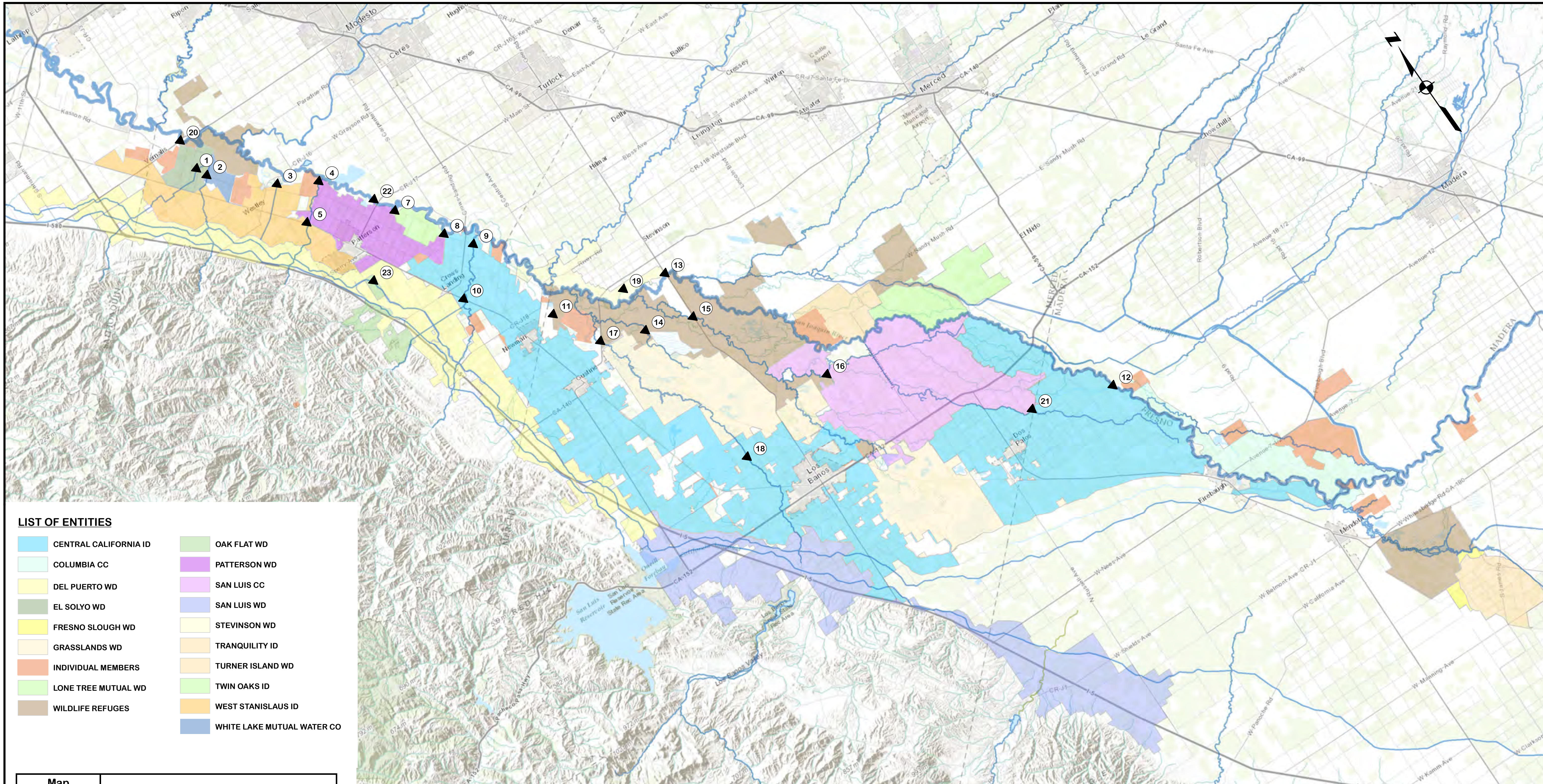
Pesticides and aquatic toxicity have been measured at this site, which has been monitored for a variety of constituents since 2004. Flow at this site is measured by a weir.

- Los Banos Creek at Highway 140 (LBCHW). This site carries agricultural, storm and irrigated wetland runoff from the Los Banos Subarea. Some pesticides have been measured at this site. Flow at this site is calculated through an estimated velocity and cross-sectional flow area.
- Los Banos Creek at China Camp Road (LBCCC). This site monitors agricultural and storm runoff from the Los Banos Subarea, upstream of the Highway 140 site. There is a farmer-maintained dam downstream of this site which is frequently used to stop flows so that it may be diverted for irrigation. Flow at this site is calculated through an estimated velocity and cross-sectional flow area.
- Turner Slough near Edminster Road (TSAER). This station is located on the eastside of the San Joaquin River and measures drainage from a portion of the Patterson Subarea. A very small number of pesticides have been detected at this site since 2004. In 2007, Stevinson Water District constructed a drain water return system upstream of the Turner Slough discharge (and monitoring) point. This system captures most of the drainage that flows through Turner Slough and returns it to the Stevinson Water District irrigation system. Since the construction of this system, discharges from Turner Slough into the San Joaquin River have become infrequent. Flow at this site is calculated through an estimated velocity and cross-sectional flow area.
- San Joaquin River at Sack Dam (SJRSD). This is a source water monitoring site located at the diversion point for San Luis Canal Company. This site is monitored for source water constituents. Flow at this site is measured across the dam.
- Delta Mendota Canal at Del Puerto Water District (DMCDP). This site monitors water quality in the Delta Mendota Canal at a Del Puerto Water District turnout. This site characterizes the source water quality typical of the Delta Mendota Canal, and is monitored for source water constituents. Flow is not measured at this site.
- San Joaquin River at Patterson Irrigation District Pumps (SJRPP). This monitoring site is located at the Patterson Irrigation District pump station on the San Joaquin River and characterizes the source water quality of the San Joaquin River in the Patterson Subarea. This site is monitored for source water constituents. Flow from this site is reported by CDEC. This site is the same as the San Joaquin River at Las Palmas site listed in the Chlorpyrifos and Diazinon TMDL program.

Table 6 lists the monitoring sites and coordinates in the WGS84 datum.

Table 6: Monitoring Site Coordinates

Site	Latitude (N)	Longitude (W)
Hospital Cr at River Road	37.61047	121.23078
Ingram Cr at River Road	37.60022	121.22506
Westley Wasteway near Cox Road	37.55822	121.16372
Del Puerto Cr near Cox Road	37.53936	121.12206
Del Puerto Cr at Hwy. 33	37.51406	121.15956
Ramona Lake near Fig Avenue	37.47875	121.06839
Marshall Road Drain near River Road	37.43631	121.03617
Orestimba Cr at River Road	37.41386	121.01489
Orestimba Cr at Hwy 33	37.37717	121.05856
Newman Wasteway near Hills Ferry Road	37.32036	120.98336
San Joaquin River at Sack Dam	36.98353	120.50050
San Joaquin River at Lander Avenue	37.29506	120.85139
Mud Slough u/s San Luis Drain	37.26164	120.90614
Salt Slough at Lander Avenue	37.24797	120.85225
Salt Slough at Sand Dam	37.13664	120.76194
Los Banos Creek at Highway 140	37.27619	120.95547
Los Banos Creek at China Camp Road	37.11447	120.88953
Turner Slough near Edminster Road	37.30411	120.90083
Blewett Drain at Highway 132	37.64053	121.22942
Poso Slough at Indiana Ave	37.00622	120.59033
SJR at PID Pumps	37.49739	121.08267
DMC at Del Puerto WD	37.43678	121.13347



Map Designation	Coalition Site Name
1	HOSPITAL CREEK AT RIVER RD
2	INGRAM CREEK AT RIVER RD
3	WESTLEY WASTEWAY NEAR COX RD
4	DEL PUERTO CREEK NEAR COX RD
5	DEL PUERTO CREEK NEAR HWY 33
7	ROMONA LAKE NEAR FIG AVE
8	MARSHALL RD DRAIN NEAR RIVER RD
9	ORESTIMBA CREEK AT RIVER RD
10	ORESTIMBA CREEK AT HWY 33
11	NEWMAN WASTEWAY NEAR HILLS FERRY RD
12	SJR AT SAC DAM
13	SJR AT LANDER AVE
14	MUD SLOUGH U/S OF SAN LUIS DRAIN

Map Designation	Coalition Site Name
15	SALT SLOUGH AT LANDER AVE
16	SALT SLOUGH AT SAND DAM
17	LOS BANOS CREEK AT HWY 140
18	LOS BANOS CREEK AT CHINA CAMP RD
19	TURNER SLOUGH NEAR EDMINSTER RD
20	BLEWETT DRAIN NEAR HWY 132
21	POSO SLOUGH AT INDIANA AVE
22	SJR AT PID PUMPS
23	DMC AT DEL PUERTO WD

LIST OF ABBREVIATIONS

CC	CANAL COMPANY
CO	COMPANY
ID	IRRIGATION DISTRICT
WD	WATER DISTRICT

ACKNOWLEDGEMENTS
Basemap courtesy of Esri, DeLorme, NAVTEQ, TomTom,Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

FIGURE 1

SCALE IN MILES
0 6 12
NAD83 California State Plane

SAN JOAQUIN VALLEY DRAINAGE AUTHORITY
WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION
MONITORING LOCATIONS

SUMMERS ENGINEERING INC.
Consulting Engineers
HANFORD CALIFORNIA
JUNE 2014

MAPS\Wside coalition\05-08-13-wside coalition district map.mxd

More than 59 different varieties of crops are grown within the Westside Coalition watershed area, ranging from fruit and nut trees to melons and cotton. **Table 7** shows the top ten crops within the Coalition area based on 2012 irrigation season USDA data.

Table 7: Top 10 Crops Grown by County

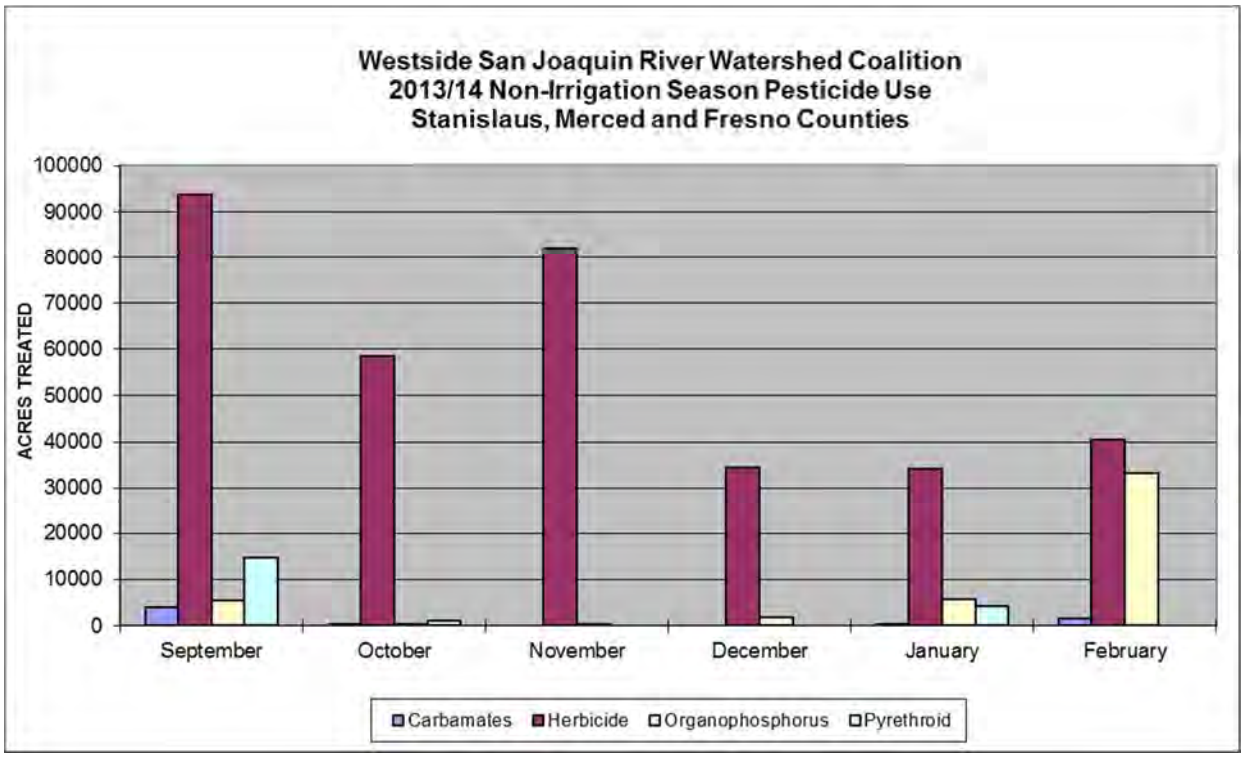
Fresno	Merced	Stanislaus
Almonds	Alfalfa	Almonds
Cotton	Cotton	Alfalfa
Alfalfa	Wheat	Tomatoes
Tomatoes	Almonds	Walnuts
Wheat	Tomatoes	Oats
Corn	Corn	Wheat
Grapes	Oats	Dry Beans
Pistachios	Walnuts	Grapes
Rice	Barley	Corn
Onions	Pistachios	Cherries

These crops are dispersed approximately evenly throughout the Coalition area, with the exceptions of cotton (mostly in the Los Banos, Dos Palos and Tranquility Subareas), and fruit trees and beans (mostly in the Patterson Subarea). The planting practices are typical for conventional agriculture within the Central Valley. A complete crop list and detailed crop calendar was presented in the "Watershed Evaluation Report", submitted in April, 2004.

Annual field crops are typically planted as seed or transplants after the field has been pre-irrigated to provide salt leaching and soil moisture for germination. These crops can be furrow irrigated using either a plowed head-ditch or gated pipe, sprinkler irrigated with hand-move sprinkler pipe, or sub-surface drip irrigated. Permanent field crops such as pasture or alfalfa are usually flood or sprinkler irrigated. The younger fruit and nut trees are almost universally irrigated with drip or micro-sprinkler systems, though some of the older orchards are still flood irrigated.

The irrigation season is typically the peak of agricultural activity, with most planting occurring between March and May, and irrigation and cultivation activities beginning just after planting and carrying on until harvest. Harvest timing is dependent on crop and weather conditions and may be as early as July or as late as October. Pesticide applications during the non-irrigation season include both insecticides and herbicides and will be applied according to the growth stage of the affected crop and the actual pest pressures. **Figure 2** shows the 2013/14 non-irrigation season monthly pesticide application within the Westside Coalition by pesticide group.

Figure 2: 2013/14 Non-Irrigation Season Pesticide Use.



A more detailed review of pesticide use and detections is provided in **Section 8**. **Table 8** shows the 10 most commonly applied pesticides during the 2013/14 non-irrigation season (by acreage) within the three counties occupied by the Westside Coalition. A complete list of reported pesticide applications is included in **Attachment 6**.

Table 8: Most Commonly Applied Pesticides by County for September 2013 – February 2014

Fresno County		Merced County		Stanislaus County	
Pesticide	**Class**	**Pesticide**	**Class**	**Pesticide**	**Class**
DIURON	Herbicide	DIURON	Herbicide	GLYPHOSATE, ISOPROPYLAMINE SALT	Herbicide
THIDIAZURON	Herbicide	THIDIAZURON	Herbicide	OXYFLUORFEN	Herbicide
PARAQUAT DICHLORIDE	Herbicide	OXYFLUORFEN	Herbicide	PENDIMETHALIN	Herbicide
OXYFLUORFEN	Herbicide	PARAQUAT DICHLORIDE	Herbicide	LAMBDA-CYHALOTHRIN	Pyrethroid
DIMETHOATE	Organo-phosphorus	DIMETHOATE	Organo-phosphorus	DIMETHOATE	Organo-phosphorus
GLYPHOSATE, ISOPROPYLAMINE SALT	Herbicide	PENDIMETHALIN	Herbicide	PARAQUAT DICHLORIDE	Herbicide
GLYPHOSATE, POTASSIUM SALT	Herbicide	GLYPHOSATE, POTASSIUM SALT	Herbicide	CHLORPYRIFOS	Organo-phosphorus
CHLORPYRIFOS	Organo-phosphorus	GLYPHOSATE, ISOPROPYLAMINE SALT	Herbicide	2,4-D, DIMETHYLAMINE SALT	Herbicide
TRIFLURALIN	Herbicide	CHLORPYRIFOS	Organo-phosphorus	METRIBUZIN	Herbicide
PENDIMETHALIN	Herbicide	HEXAZINONE	Herbicide	GLYPHOSATE, POTASSIUM SALT	Herbicide

SECTION 5: FIELD SAMPLING PROCEDURE

Field water quality data and sample collections were collected as outlined in the Westside Coalition's Quality Assurance Project Plan (QAPP) and Field Sampling Manual. Three sampling crews have been trained by the analytical laboratories to collect samples according to the Westside Coalition's QAPP and Field Sampling Manual. These crews are responsible for collecting samples at each of the monitoring sites: The field coordinator for the northerly region is responsible for collecting samples from north of Newman Wasteway. The field coordinator for the southerly region is responsible for collecting samples south of (and including) Newman Wasteway. The sampling responsibilities include completion of the field data sheets, collection of water and sediment samples, completion of labels and chain of custody sheets, and coordination with the labs for sample pickup. Samples are collected both as a direct grab from the water-body or as a bucket grab where a large volume of water is collected in a stainless steel bucket and transferred to the sample bottles. Details of these collection methods are explained in the Field Sampling Manual. The list of tested constituents is discussed in the MRP Order.

In accordance with the MRP Order, the Westside Coalition collected non-irrigation season ambient water and sediment samples starting with the September 2013 sampling event. Aquatic toxicity, pesticides and metals are analyzed at four specific sites according to the monitoring plan.

SECTION 6: FIELD AND LABORATORY QUALITY CONTROL SAMPLES

Laboratory Quality Control Samples. The three laboratories that perform analyses for the Westside Coalition monitoring activities are certified through the National Environmental Laboratory Accreditation Program (NELAP) and perform all testing and analyses according to the most current NELAP standards, including the performance of several quality control tests to ensure all methods and equipment are operating correctly. A handful of quality control tests for APPL and Caltest failed to meet acceptability criteria. These failures represented less than 2.5% of the total QA/QC analyses performed by each lab and do not affect data usability. Details of the laboratory quality control review are included in **Appendix D**. Although the Westside Coalition reviews each of the laboratories' QA/QC results, it considers each of the laboratories to be experts in their respective fields and defers to their judgment regarding data acceptability.

Field Quality Control Samples. Field quality control samples included the collection of field duplicate samples for sediment and aquatic toxicity analysis, and the collection of both field duplicate and field blank samples for pesticides, drinking water, and general physical constituent analysis. It should be noted that the field duplicate samples are typically collected as separate samples simultaneously with the event sample (as opposed to field split samples). The calculated RPD between the event sample and field duplicate sample should be considered a measurement of site water variability.

- **Water Chemistry Analyses.** Six sets of field duplicate and field blank samples were collected during the reporting period and analyzed for general chemistry and drinking water constituents. A comparison of the event samples, duplicate samples, and blank samples is tabulated in **Attachment 3**. A total of 162 duplicate analyses were completed

and compared to the event sample results. Eighteen duplicate samples exceeded the 25% relative percent difference (RPD) established in the QAPP for:

Ammonia (N)	Copper (Dissolved)	Lead (Dissolved)	Lead (Total)	Zinc (Total)
Nitrate+Nitrite	TKN	Orthophosphate (P)	E. coli	Selenium
Turbidity	DOC	TSS		

These exceedances of the field duplicate quality control criteria account for approximately 11% of the field duplicates analyzed and are reflective of the complicated nature of the site water and the naturally occurring variations of the stream water quality. Although the number of field duplicates exceeding the RPD criteria is higher than in previous report periods, the Westside Coalition does not expect these variations to impact data usability.

Six field blank sample sets were analyzed during the report period (157 results, total). Of these, six analyses resulted in values greater than 20% of the event sample result for:

Copper (dissolved) Copper (total) Ammonia (N)

- **Pesticide Analyses.** Six field duplicate and field blank samples sets were collected during the reporting period and analyzed for pesticides (387 and 372 respectively). Calculated RPD for field duplicate or field blank results did not exceeded the criteria (25% and 20%, respectively) for any analyte during this report period. The results of the field blank, field duplicate and event sample comparisons are tabulated in **Attachment 3**.
- **Aquatic Toxicity Analyses.** Field duplicate samples were collected and analyzed for toxicity to all species tested during the report period. The calculated RPD value exceeded the 25% threshold once (Selenastrum: 36.4%; Event 109) during the period of this report.
- **Sediment Toxicity Analyses.** A field duplicate sample was collected for sediment toxicity during the September sampling event (Event 106). The measured RPD was 2.6%.

Completeness for sampling collection and analysis was reviewed for samples collected during this monitoring program. Completeness was measured for sample collection and transit, sample analysis, and field quality control samples.

- Collection and Transit: All samples were collected according to the Coalition's MRP and QAPP and were delivered, under the proper COC's to the respective laboratories for analysis.
- Sample Analysis: Completeness for sample analysis during this reporting period is 100%.
- Field Quality Control Samples: All field quality control samples were collected and analyzed. Completeness for toxicity duplicate samples is 100% for this reporting period. The completeness for field blank and duplicate samples is 100% for both pesticide analyses and water chemistry samples.

SECTION 7: ANALYTICAL METHODS

Table 4 indicates the laboratories responsible for the analytical results of this monitoring program, the analytical method used, and the standard operating procedure (SOP) document number. This table reflects the constituents analyzed as part of the Revised MRP.

Chain of Custody (COC) sheets were maintained from the time of sample collection to receipt at the laboratories. Copies of the COC sheets are included in **Appendix A**, along with a summary of the data results. The data summary includes all of the field readings, analytical chemistry results, pesticide scan results, and toxicity screening test results. The original laboratory reports are included in **Appendix C**. These reports also include all of the field and internal quality control results.

The laboratory original data sheets (raw data) for the toxicity results are included in **Appendix C**, as part of the laboratory reports. Raw data for general physical results, drinking water results, and pesticide results are kept by the laboratories for a minimum of five years and are available upon request.

SECTION 8: DATA INTERPRETATION

The primary objective of the monitoring program is to identify water bodies that are adversely affected by agricultural discharges and to help determine the impacts of management activities. The monitoring program has used a combination of toxicity tests and pesticide analyses, along with close coordination among districts and growers to not only identify problem areas but also to determine the magnitude and cause of the problems. During this report period, toxicity analyses for all three species along with pesticide analyses and metals analyses were performed according to the non-irrigation season Special Monitoring schedule included in the MRP Order (as modified in the March 2012 letter. See **Attachment 7**).

The Westside Coalition's monitoring program includes 22 monitoring sites on the Westside of the San Joaquin Valley (see **Table 2** and **Figure 1**). These sites are representative of the various regions within the Coalition and include agricultural discharge sites, storm drainage sites, and irrigation source water sites. A summary of this data is presented in **Appendix A**, and the laboratory data reports are provided in **Appendix C**.

All of the analyzed parameters were reviewed regularly to evaluate the overall health of the water bodies in the Coalition area. This reporting period covered the 2013/14 non-irrigation season months, during which there was minimal agricultural activity. Additionally, there were few storm events during this period and only one generated sufficient (although minimally sufficient) runoff to justify a rain event sample collection. Statistically significant aquatic toxicity occurred once during the rain event to algae. The observation of aquatic toxicity is detailed in **Attachment 2**.

Ceriodaphnia dubia. There were no observations of toxicity to *Ceriodaphnia dubia* during this report period.
Selenastrum capricornutum (algae). Toxicity to algae was observed during Rain Event 14 (February 10, 2013)

- Salt Slough at Sand Dam – 43% of control growth. A TIE was performed and indicated that pesticides were the likely cause. Diuron (5.6 µg/L) and Prowl (0.71 µg/L) were detected in the sample and are expected to be the cause of toxicity.

Pimephales promelas (fathead minnow). There were no observations of fathead minnow toxicity during this report period.

Sediment Toxicity (*Hyalella azteca*). Eleven samples were collected (including one duplicate) and tested for toxicity to *Hyalella azteca* on September 11th. Statistically significant toxicity was measured at five sites. **Table 9** lists the Percent Survival results for the sites exhibiting sediment toxicity; follow up pesticide analysis were performed on four samples. **Table 10** summarizes the detected pesticide data at those four sites. See **Appendix C** for the full laboratory report. **Table 11** shows the sediment toxicity results since September 2006.

Table 9: Sites Exhibiting Statistically Significant Toxicity to *Hyalella azteca.*

Site	Percent Survival
Del Puerto Creek at Hwy 33*	58.8%
Hospital Creek at River Road*	0.0%
Ingram Creek at River Road*	0.0%
Los Banos Creek at China Camp Road	80.0%
Westley Wasteway near Cox Road*	2.5%

* Sample analyzed for specific pesticides.

Table 10: Detected Pesticides in Sediment Samples (September 2013)

	Del Puerto Creek at Hwy 33	Hospital Creek at River Rd.	Ingram Creek at River Rd.	Westley Wasteway near Cox Road
Sediment Toxicity (% survival)	58.8	0.0	0.0	2.5
Percent Solids (%)[1]	30/90	71/99	56/96	38/93
Bifenthrin (ng/g dw)	5	0.85	4.1	23
Chlorpyrifos (ng/g dw)	ND	0.13j	0.59	0.2j
Lambda-cyhalothrin (ng/g dw)	0.19j	4	8.3	0.86
Cyfluthrin (ng/g dw)	ND	ND	ND	1.2
Cypermethrin (ng/g dw)	ND	ND	1.1	ND
DDD (ng/g dw)	ND	ND	ND	ND
DDE (ng/g dw)	ND	23	22	ND
DDT (ng/g dw)	ND	ND	ND	ND
Es/Fenvalerate (ng/g dw)	0.38	0.32j	1.3	1.7
Fenpropathrin (ng/g dw)	0.16j	ND	ND	ND
Total Organic Carbon (mg/Kg dw)	22,000	1,500	7,900	17,000

1 – Percent Solids Analysis/Dried Sediment as Extracted

Details of the sediment pesticide analyses are in **Attachment 4.**

Table 11: Sediment Toxicity Results.

Site	Sept 13 % Survival	Sept 13 Toxicity (Y/N)	March 13 % Survival	March 13 Toxicity (Y/N)	Sept 12 % Survival	Sept 12 Toxicity (Y/N)	March 12 % Survival	March 12 Toxicity (Y/N)
Blewett Drain (Vernalis at hwy 132)	86.2	N	**3.75**	**Y**	**3.75**	**Y**	95	N
Hospital Creek	**0**	**Y**	96.3	N	**2.5**	**Y**	**81.3**	**Y**
Ingram Creek	**0**	**Y**	**1.25**	**Y**	**1.3**	**Y**	**60**	**Y**
Westley Wasteway	**2.5**	**Y**	**1.25**	**Y**	**13.8**	**Y**	**15**	**Y**
Del Puerto Creek (Cox Rd)	90	N	96.2	N	93.8	N	97.5	N
Del Puerto Creek (Hwy 33)	**58.8**	**Y**	98.8	N			98.6	N
Orestimba Creek at River Rd.			98.8	N	77.5	N	97.5	N
Orestimba Creek at Hwy 33			93.8	N	**10**	**Y**	**36.3**	**Y**
Ramona Lake at Fig Ave.	93.3	N	**91.3**	**Y**	96.3	N	95	N
Newman Wasteway			**90**	**Y**	92.5	N	100	N
Poso Slough	96.3	N	98.8	N	91.3	N	96.3	N
Turner Slough								
SJR at Lander								
Salt Slough at Lander								
Salt Slough at Sand Dam	97.5	N	83.8	N	96.3	N	92.5	N
Los Banos Creek at Hwy 140								
Los Banos Creek at China Camp Rd.	**80**	**Y**	100	N	85	N	100	N
Los Banos Creek at Sunset Ave.								
Mud Slough								

Site	Sept 11 % Survival	Sept 11 Toxicity (Y/N)	May 11 % Survival	May 11 Toxicity (Y/N)	Sept 10 % Survival	Sept 10 Toxicity (Y/N)	March 10 % Survival	March 10 Toxicity (Y/N)
Blewett Drain (Vernalis at hwy 132)	**56.3**	**Y**	86.3	N				
Hospital Creek	**20**	**Y**	**8.75**	**Y**	**0**	**Y**	**77.5**	**Y**
Ingram Creek	**0**	**Y**	**16.3**	**Y**	**0**	**Y**	**35**	**Y**
Westley Wasteway	90	N	93.8	N	**41.2**	**Y**	N/A	N/A
Del Puerto Creek (Cox Rd)	88.8	N	81.3	N	**0**	**Y**	**77.5**	**Y**
Del Puerto Creek (Hwy 33)			96.3	N	**81.2**	**Y**	92.5	N
Orestimba Creek at River Rd.	96.3	N	100	N	95	N	96.2	N
Orestimba Creek at Hwy 33	**0**	**Y**	92.5	N	93.8	N	90	N
Ramona Lake at Fig Ave.	96.3	N	**92.5**	**Y**	92.5	N	93.8	N
Newman Wasteway	97.5	N			97.5	N	93.8	N
Poso Slough	98.8	N	**87.5**	**Y**				
Turner Slough	95	N	100	N				
SJR at Lander	98.8	N						
Salt Slough at Lander	97.5	N						
Salt Slough at Sand Dam	100	N	**78.8**	**Y**				
Los Banos Creek at Hwy 140	97.5	N	97.5	N				
Los Banos Creek at China Camp Rd.	97.5	N	98.15	N	98.8/96.2	N	95	N
Los Banos Creek at Sunset Ave.							96.2	N
Mud Slough	98.8	N	96.3	N				

Pesticide Analyses.
A total of five different pesticides were detected in water samples during the 2013/14 non-irrigation season for a total of 12 detections. Two of these detections (17%) were below the reporting limit (DNQ). Each of the detected pesticides is discussed below.

- Chlorpyrifos (1 detection): Chlorpyrifos is a common organophosphate pesticide used to control a wide range of insects in orchards, pasture, and field crops. It can be used as a dormant spray for fruit and nut trees. Chlorpyrifos use during this reporting season likely occurred on field and forage crops (corn, cotton, and alfalfa) in the fall and as dormant sprays on fruit and nut trees in the mid to late winter.
- Dimethoate (2 detection): Dimethoate is an organophosphate pesticide used to control a wide range of insects. It is used on a variety of field crops including alfalfa, beans, tomatoes, and cotton.
- Diuron (6 detections): Diuron is a substitute urea herbicide used to control weeds in a variety of field crops including cotton, alfalfa, walnuts and wheat. It is also effective in controlling algae.
- Methomyl (1detection): Methomyl is a carbamate pesticide used for foliar treatment of alfalfa for forage, vegetable, fruit and field crops, cotton, commercial ornamentals.
- Pendimethalin (2 detections): Pendimethalin is a selective herbicide used to control most annual grasses and certain broadleaf weeds in field corn, potatoes, rice, cotton, soybeans, and sunflowers.

Exceedances of Recommended Water Quality Values.
Water chemistry analyses were compared to recommended water quality values[3] (RWQV). **Attachment 5** tabulates all of the RWQV exceedances for the reporting period by site.

- **Field, General Physical and Drinking Water Quality Exceedances.** Comparisons were made to several RWQVs. **Attachment 5** tabulates the results for these constituents and the comparison to the RWQVs. The Westside Coalition performed analyses or observed more than 2130 field and chemistry (non-pesticide) parameters during the reporting period, during which, 227 (11%) results were greater than the RWQVs. Electrical conductivity and total dissolved solids (TDS) accounted for 92 and 77, respectively, of these exceedances (approximately 74% of the exceedances, combined). E. coli results accounted for 13 of these exceedances, 15 for boron and 9 for dissolved oxygen. The RWQV for cadmium, copper, lead, nickel, and zinc are dependent on site water hardness and is a calculated value. There were no exceedances of dissolved metals during this report period. Potential causes for EC/TDS, E. coli, DO, and boron exceedances are discussed below.
    - **EC/TDS.** Electrical Conductivity and TDS are measures of the amount of salts dissolved in the water column. There are a variety of sources of salts that may be contributing to these results including natural marine sediments, accretion of shallow/perched ground water, and the irrigation source water. Additionally, the many growers to rely on wells to supplement surface water supplies. Most of the groundwater wells within the Westside Coalition are more saline than the surface water sources.

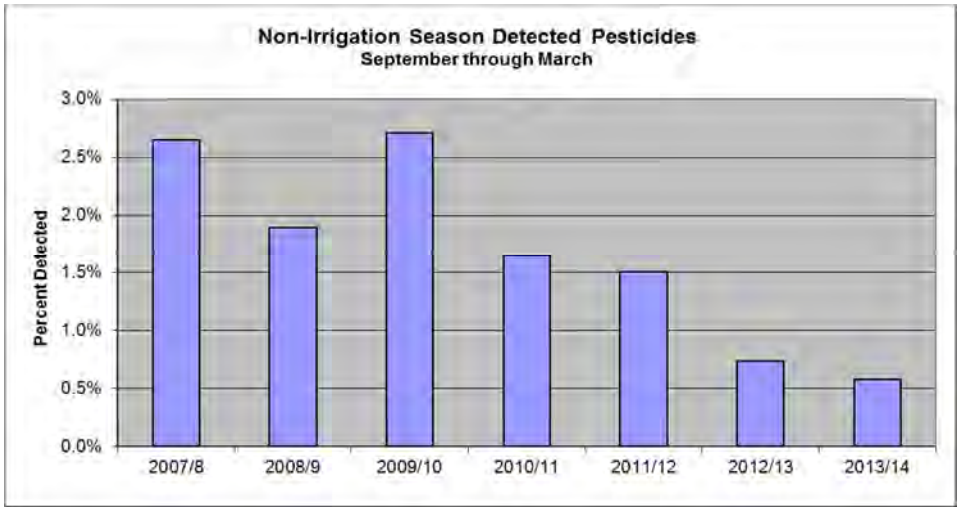
[3] Water Quality Limits were provided by the Central Valley Regional Water Quality Control Board as part of the MRP Order. Water quality limits for cadmium, copper, lead, nickel and zinc are calculated from equations provided by the Central Valley Regional Water Quality Control Board.

- **E. coli.** E. coli is a measurement of bacteria in the water column. The Westside Coalition has participated in a study to attempt to identify the source of these exceedances. The preliminary results were not conclusive, however human sources were identified as the possible cause for at least some of the exceedances. There is also some suspicion that E. coli colonies have become self-sustaining within some watersheds. The Westside Coalition's Management Plan, approved November 18, 2008 discusses future activities related to the E. coli exceedances. In a letter dated February 17, 2012, the Westside Coalition was requested to participate in a group discussion to develop a joint work-plan. The Westside Coalition will participate in this workgroup.
- **Dissolved Oxygen.** DO is measured through a field probe at the time of sample collection. By its nature, DO is highly variable and influenced by a variety of conditions including sunlight exposure (related to time of day and time of year), turbidity, biological growth and decay, and channel turbulence. The cause of the DO exceedances measured during this report period is not immediately clear, in many cases, a low DO measurement is accompanied with no flow – indicating that the water is stagnant.
- **Boron.** Boron is a metal element commonly found in soils on the west side of the San Joaquin Valley. It is not applied by growers for any agricultural purpose but may be dissolved in tail water, storm runoff, subsurface flows, or groundwater supplies.

The number and type of field and general chemistry exceedances was not dramatically different than those of prior years.

- **Pesticide exceedances.** Up to 48 different pesticides were tested at monitoring sites each month. During the non-irrigation season, pesticide samples are collected at four sites which convey irrigation runoff from wetland areas on a monthly basis, source water sites (organophosphorus pesticides) and at all sampled sites during rain events. Samples collected within the Westside Coalition during this report period provided almost 1800 pesticide results, >99% of which resulted in no detection. Of the detected pesticides (12), ten were greater than established RWQVs (chlorpyrifos, diuron, dimethoate, and methomyl).

Figure 3: Percent of Total Pesticides Detected.



As a fraction of the number of pesticide tests, there were approximately 25% less pesticide detections during this reporting period as compared to the previous non-irrigation season

(0.58% this period versus 0.7% in 2012/13 and 1.5% in 2011/12). **Figure 3** shows the percent of total pesticides detected in each non-irrigation season since 2007/8 (number of detections / number of results).

Chlorpyrifos and Diazinon. In 2010, the Regional Board implemented a chlorpyrifos and diazinon TMDL on the San Joaquin River. In response to this TMDL, the Westside Coalition has increased its outreach efforts with additional grower workshops and individual grower meetings in regions with a history of chlorpyrifos or diazinon exceedances. These meetings emphasize water quality issues related to these materials and management practices that could be implemented to reduce or eliminate discharge. During this reporting period there were no detections of chlorpyrifos or diazinon at the San Joaquin River monitoring sites. As of the date of this report, the Westside Coalition is organizing "one on one" grower meetings to increase awareness of the chlorpyrifos and diazinon TMDL issues as well as other water quality matters. Pesticide use report (PUR) data has been acquired and analyzed and it will provide useful information and mapping for more effective "one on one" grower outreach.

In accordance with the TMDL program requirements, an annual monitoring report for chlorpyrifos and diazinon monitoring results, covering the period of October 2012 through September 2013, was submitted in May 2014. Westside Coalition monitoring results from September 2013 through March 2014 have not detected either chlorpyrifos or diazinon in any of the samples from the three San Joaquin River monitoring sites.

In response to the TMDL and other water quality concerns, a Stakeholder group of growers in the Hospital and Ingram creeks subwatersheds has formed. Details about this group are discussed in **Attachment 6**.

SECTION 9: ACTIONS TAKEN TO ADDRESS WATER QUALITY IMPACTS – MANAGEMENT PLAN ACTIVITIES

In October 2008, the Westside Coalition submitted a Management Plan and Focused Watershed Plan (Focused Plan) which described the actions that would be taken to address the water quality issues identified by the monitoring program. The Management Plan described a general approach that covered all of the subwatersheds within the Westside Coalition. Focused Plans have been developed for specific issues within Hospital Creek, Ingram Creek, Del Puerto Creek, Westley Wasteway, Orestimba Creek, and Salt Slough (including both Salt Slough monitoring sites and Poso Slough), as well as, Blewett Drain and Marshall Road Drain. **Table 12** shows the implementation schedule listed in the Management Plan (see the Management Plan – General Approach, Table 4, October 23, 2008). In addition to these actions, the Westside Coalition reviews exceedances over the past three years to determine what modifications (if any) need to be made to the Management or Focused plans. A tally of exceedances from March 2011 through February 2014 is included in **Attachment 6**, along with a more detailed review of Management Plan activities. Based on the review of that data, additional focused plans are scheduled. These are shown in **Table 13**.

Table 12: Management Plan Implementation Schedule

Item	Action	Affecting	Estimated Start	Estimated Completion
1	Continue monitoring program	All Categories	On-going	On-going
2	Develop and implement Focused Plan	Site-specific	July 2008	2013
3	Compile MP inventory	All Categories	Jan. 2009	Complete for FP1, FP2, and FP3
4	Develop subwatershed maps	All Categories	On-going	Jan. 2013
5	Determine regional pesticide application	Pesticides, aquatic toxicity	On-going	Annually updated
6	Continue participation in the Dissolved Oxygen Study	Dissolved Oxygen	On-going	On-going
7	Analyze results of E. coli study and map/inventory potential sources	E. coli	Sept. 2007	Jan. 2010
8	Continue outreach and education efforts	All Categories	On-going	On-going
9	Analyze for correlation between low DO and other parameters	Dissolved Oxygen	Sept. 2008	June 2009
10	Continue participation in the Salinity TMDL Program	EC/TDS	On-going	On-going
11	Track changes in water quality	All Categories	On-going	On-going

Table 13: Anticipated Focused Plan Schedule

Subwatershed	Anticipated Start Date
Ramona Lake	February 2015
Newman Wasteway	February 2015
Los Banos Creek	February 2016

1. Continue Monitoring Program.
This semi-annual monitoring report represents the 19th monitoring report submitted by the Westside Coalition since its inception in 2004. The monitoring program (as revised by the MRP Order) is designed to be a dynamic program that aggressively tracks known water quality issues and conducts broad assessment monitoring to identify new issues (see the MRP Order). The monitoring program is also designed to support the activities of the Management Plan and the Focused Watershed plans. The results of the monitoring program are reported twice annually (June and November). Beginning in March of 2011 the Westside Coalition implemented assessment monitoring at all discharge sites which continued through February 2012. The results of the assessment monitoring period were reviewed and adjustments were made to the Special Project Monitoring table included in the MRP order (see **Attachment 7**). Assessment monitoring will begin again in March 2014 and will continue on into 2015.

2. Develop and Implement Focused Watershed Plan.
A Focused Plan for the Ingram and Hospital Creek watersheds was developed and submitted to the Regional Board on October 23, 2008 followed by a Focused Plan for the Westley Wasteway, Del Puerto Creek, and Orestimba Creek in February 2011. The Focused Plan for Salt Slough (including Poso Slough) was adopted in December 2011. A focused plan for Blewett Drain and Marshall Road Drain was submitted In July 2013. Since that time, the Westside Coalition has implemented a number of activities. A detailed update of the focused plan activities is included in **Attachment 6.** Additional focused plans have been scheduled (see **Table 13**).

3. Compile Management Practice Inventory.
A management plan survey for the Ingram and Hospital Creek watersheds was completed in 2010 with a similar survey completed for Del Puerto Creek, Westley Wasteway, and Orestimba Creek completed in the Spring of 2011, the results of which were reported in the June 2011 SAMR. A management practice survey for Salt Slough was completed and submitted in August 2012. A management plan survey for the Blewett and Marshall drains was sent to affected growers in November 2013 and as of the date of this report, the surveys continue to be received and processed by the Coalition. It is anticipated that all surveys will be received by November 2014. A summary of the survey results received to date are included in **Attachment 6**.

4. Develop Subwatershed Maps.
The Westside Coalition submitted subwatershed maps for the major watersheds within its boundaries in 2008. These maps were based on known drainage patterns and available mapping information. As part of the focused plans, the Westside Coalition collected highly detailed drainage information on the Ingram and Hospital Creek subwatersheds. Draft maps for the Westley Wasteway, Del Puerto Creek, Orestimba Creek, and Salt Slough subwatersheds have been developed and submitted in previous SAMRs. The Coalition is currently collecting data and other information to be able to produce subwatershed maps for the Blewett and Marshall drains as well.

5. Determine Regional Pesticide Use.
Pesticide use report data is collected from the agricultural commissioners in the various counties occupied by the Westside Coalition. In addition to general trends analysis, specific regional pesticide use data is periodically reviewed to attempt to compare with pesticide detections through the monitoring program. Limitations with pesticide use report data completeness and availability limit the usefulness of this data for that purpose. A summary of available pesticide use data is provided in **Attachment 6**.

6. Continue Participation in the Dissolved Oxygen Study.
On January 27, 2005 the Central Valley Regional Water Quality Control Board adopted Resolution R5-2005-0005 which included a TMDL directed to the point and non-point discharges that contribute to the dissolved oxygen impairment in the Stockton Deepwater Ship Channel (DO TMDL). As part of the DO TMDL certain studies were required. The San Joaquin Valley Drainage Authority received funds from the State Water Resources Control Board to undertake these studies (Recipient Agreement ERP-02D-P63). These studies were completed in June of 2008. The project established a series of monitoring stations, developed a DO model, characterized the fate of algae and nutrients, developed linkages between flow, algae, nutrients and dissolved oxygen. Additional studies were proposed to connect the results of this effort to downstream impacts. This work is ongoing. The Westside Coalition has maintained the monitoring sites within boundaries of the Westside Coalition to maintain the data availability. There are provisions in the agreement for extensions of time. The Westside Coalition also is prepared to continue to participate in the DO TMDL as further actions are developed. The SJVDA is currently participating with other stakeholders to provide funding for operation of the aerator installed by the Department of Water Resources. A funding agreement was completed in April 2012 between the parties and a mechanism in place to fund short term operation of the Stockton Deepwater Ship Channel aerator. There are provisions in the agreement for extensions of time through May 31, 2016.

7. Analyze results of E. coli study and map/inventory potential sources.
Since 2007, the Westside Coalition has participated in studies and other investigations to attempt to identify the source and cause of various E. coli exceedances (reported in previous SAMRs). A technical committee is currently developing an approach plan with which the Westside Coalition will participate.

8. Continue Reporting and Outreach.
Westside Coalition outreach during this report period included direct to grower mailings, publications distributed by the districts, and various meetings.

- Direct mailings. Letter-surveys were sent to 308 growers in the Blewett Drain and Marshall Drain areas regarding the Focused Management Plan for their subwatersheds. A variety of memo and letters were sent to various individuals and entities regarding water quality issues and upcoming meetings.
- District Publications. Several of the districts within the Westside Coalition publish newsletters that are mailed to district growers regularly.
- Stakeholder meeting. Beginning in November 2012, growers within the Hospital and Ingram creek subwatersheds formed a stakeholder group to discuss issues related to the ILRP, water quality conditions and management practices that they could implement at the farm level. The Stakeholder group has held two meeting during this report period and continues to meet regularly.
- Grower Meetings. Several meetings were organized by various district members of the Coalition, during which the current water quality issues and future long term plans were discussed with the growers and others. These meetings are listed in **Table 14** below.
- Individual (tailgate) meetings. A staff person of the Westside Coalition performed a number of tailgate meetings with coalition growers to discuss water quality issues and management practices. 9 tailgate meetings were held during this report period.
- Agricultural Chemical Manufacturer. Staff from the Westside Coalition met with a senior manager of Dow Chemical. The purpose of the meeting was to inform him of the water quality issues caused by the use of Chlorpyrifos and to ask for their assistance to help curb the pesticide detections.
- Tomato Grower Meetings. Staff from the Coalition met with 7 different large tomato growers to discuss the May 2013 Diazinon exceedances.
- Observation drives. Staff from the Westside Coalition performed weekly drives through key coalition areas and reported observations on farming activities and creek or drain flow conditions. When appropriate, this information was used during tailgate and other outreach meetings.

Table 14 lists the outreach activities performed during this reporting period coalition-wide.

Table 14: Outreach Meetings

Date	Group	Location	Description	Attendance	By
10/9/2013	Salt/boron Stakeholder	Los Banos	Real Time Model presentation	10	USBR, Joel Herr presentation
10/29/2013	Ingram/Hospital Stakeholder Meeting	Westley	Continuing stakeholder group meeting	20	Chester Anderson
11/7/2013	Spray Safe	Modesto	Presentation to PCA's	250	Chris Linneman Presentation
1/7/2014	SJVDA Meeting	Los Banos	Coalition Board Meeting: new program requirements	15	SJVDA Board of Directors
1/14/2014	Stevinson WD - Bob Kelly	Newman	Reviewed new requirements	1	Joe McGahan
1/14/2014	Paramount Farms	Firebaugh	Reviewed new requirements	2	Joe McGahan
1/22/2014	Ingram/Hospital Stakeholder Group	Westley	Review new order, management plan status, EQIP grant funding	20	Chester Anderson, Joe M., Rich Peltzer, Diana Waller NRCS
2/4/2014	SJVDA Meeting	Los Banos	Coalition Board Meeting: new program requirements	15	SJVDA Board of Directors
2/10/2014	Salt/boron Stakeholder	Conference call	Real Time Framework Document	10	Joe McGahan, USBR, stakeholders
2/11/2014	Sustainable Cotton Project	Firebaugh	Stakeholder outreach meeting	20	Chris Linneman Presentation
2/12/2014	Westside RCD Meeting	Patterson	Report to board	10	Chester Anderson and Rich Peltzer
2/25/2014	Growers in Westside Coalition	Dixon	Field visit of vegetated ditches	10	Chester Anderson
Various	One-on-one Grower Visits	Northerly Area	Various Coalition Relevant Topics	Varies by Incident	Rich Peltzer

Grant Funding

The Westside Coalition continued to offer private grant funding to its members for construction of new tailwater silt ponds or to maintain existing ponds. The program funds 75% of the costs of any single project, up to a maximum of $6,000 per project.

Proposition 84 has also been made available in 2012 through a program managed by CURES and funded by the State Water Resources Control Board. Information on the grant funding availability has been communicated during the previous reporting period to landowners and operators through direct mailings, grower group meetings and individual contacts with landowners.

The Proposition 84 program provides funding for projects in the Central Valley primarily for the purpose of improving irrigation systems. Outreach by CURES was focused on landowners with fields along waterways with management plans in place by the local watershed coalition and located in the northern San Joaquin Valley, San Joaquin County/Sacramento Rivers Delta and

southern Sacramento Valley. To date, 47 projects have been funded of which 18 have been completed. The projects will ultimately affect nearly 4,600 acres within the Westside Coalition. A map showing the completed and in-progress projects funded through Proposition 84 is included in **Attachment 6**.

Regional projects. In addition to grower-implemented management practices, several districts within the Westside Coalition have implemented or are in the process of implementing a number of regional drainage management projects. Although these project differ in approach, they all capture tailwater flows and return them to the irrigation system, thereby reducing the volume of tailwater discharged from the respective watershed. See **Attachment 6** for a more detailed discussion.

9. Analyze for Correlation Between Low DO and Other Parameters.
The Westside Coalition has performed a preliminary review of the low DO measurements and other data. A summary of this review was included in the November 2009 Semi-Annual Monitoring Report. No additional work has been performed on this issue.

10. Continue Participation in the Salinity TMDL Program.
The Westside Coalition is actively engaged in the Central Valley Salinity Alternatives for Long-term Sustainability (CVSALTS) process and is an active member of the Central Valley Salinity Coalition that has been organized to facilitate the funding of the CVSALT effort. The Coalition's participation includes both monetary contributions and a substantial commitment of staff time.

Specific actions by the Westside Coalition to support the CVSALT efforts include: (1) Coalition representative's consistent participation in the CVSALT committees and sub-committees including serving as chair of the Economic and Social Impact Committee. (2) Consistent participation and economic contributions to the Central Valley Salinity Coalition, including representative serving as president of the CV Salinity Coalition. In addition the San Joaquin Valley Drainage Authority is providing contracting and contract administration services for the CVSALT effort. The Westside Coalition has committed to substantial resources to help ensure that the CVSALT effort results in an effective and efficient salinity management program for the Central Valley.

The SJVDA has been participating with the US Bureau of Reclamation in implementation of a Real Time Monitoring Program (RTMP). This program is a component of the compliance with the Vernalis TMDL for salt. It is anticipated that the RTMP will be submitted to the CVSALTS Lower San Joaquin River Committee for review and comment and then would be taken to the Regional Board for approval.

11. Track Changes in Water Quality.
Water quality changes are tracked through the Westside Coalition's monitoring program (see the MRP Order). Water quality data is reported and summarized twice annually.

Other Activities:

- **Conversion to high efficiency irrigation systems:** Several of the districts within the Westside Coalition have implemented grant and loan programs to assist growers in

upgrading their irrigation systems, and more 11,000 acres of high efficiency systems came on-line during the 2012/13 non-irrigation season within the Westside Coalition, including 4,100 acres funded (or approved for funding) through the Proposition 84 program. Typically, irrigation improvements are installed during the non-irrigation season for use in the following irrigation season. For the 2013/14 non-irrigation season San Luis Canal Company provided $1,239,000 in funding assistance for irrigation system improvements and CCID provided $282,000 in funding assistance.

- **NRCS EQUIP Funding:** The National Resource Conservation Service (NRCS) provides funding to growers for the construction of various improvements including distribution systems (i.e. canal lining or piping) and irrigation system improvements (such as drip or micro-sprinklers). Funding is provided directly to growers (although often with assistance from the Districts) and typically covers the cost of materials. Detailed data on the funding provided and acres impacted were not available by the due date of this report. The Westside Coalition will work with NRCS to develop and summarize that data.

Monitoring Results:
Data gathered since the inception of the monitoring program has allowed the Westside Coalition to identify problem areas and issues. Details of sites exhibiting significant toxicity during this monitoring period are included in **Attachment 2** and all results that exceeded RWQVs are included in **Attachment 5**. This information, along with results from previous years will be used as talking points during upcoming grower meetings to outline the problem issues and sites. The Management Plan and Focused Watershed Plan also outline approaches that will be implemented to address the highlighted issues. A number of preliminary conclusions can be made from the data collected so far:

- **Sediment Toxicity:** Sediment toxicity tests were performed on 11 samples (including one duplicate) from 10 sites collected in September (Event 106). Statistically significant toxicity was measured at five sites (See **Tables 10** and **11**), and follow up pesticide testing was performed on samples from four sites. These results were compared to literature values for the purpose of determining the probable cause of toxicity in each sample. In all cases pesticides were present in sufficient quantity to have caused the toxicity.

    - Del Puerto Creek at Hwy 33 (58.8% survival): A total of 0.47 sediment toxic units (TUs) were calculated based on the detected pesticides. Bifenthrin accounted for 0.44 TUs, with esfenvalerate accounting for the remaining 0.03 TUs.
    - Hospital Creek (0.0% Survival): A total of 7.2 TUs, with lambda cyhalothrin accounting for 5.93 TUs and bifenthrin 1.09 TUs, respectively. Chlorpyrifos accounted for 0.05 TUs.
    - Ingram Creek (0.0% Survival): 3.85 TUs were calculated, with bifenthrin and lambda cyhalothrin, and esfenvalerate accounting for 1.0TUs, 2.33 TUs, and 0.04 TUs, respectively. Cypermethrin accounted for 0.37 TUs and chlorpyrifos accounted for 0.04 TUs.
    - Westley Wasteway (2.5% Survival): A total of 2.85 TUs, with bifenthrin, lambda cyhalothrin, and esfenvalerate accounting for 2.60 TUs, 0.11 TUs, 0.07 TUs, and 0.06 TUs respectively. Chlorpyrifos accounted for 0.01 TUs.

Bifenthrin, Lambda-cyhalothrin, Cypermethrin, and Esfenvalerate are all pyrethroids used on a variety of field and tree crops including, tomatoes, corn, beans, alfalfa, walnuts, and almonds, all of which are grown in the northerly part of the Westside Coalition. The majority of walnut and almond orchards within the Westside Coalition are irrigated with micro-sprinklers and drip systems which do not generate significant tailwater. It is likely that the discharge of these materials were from field crops using furrow or other surface irrigation methods.

Figure 4: Fall Count of Sediment Toxicity.

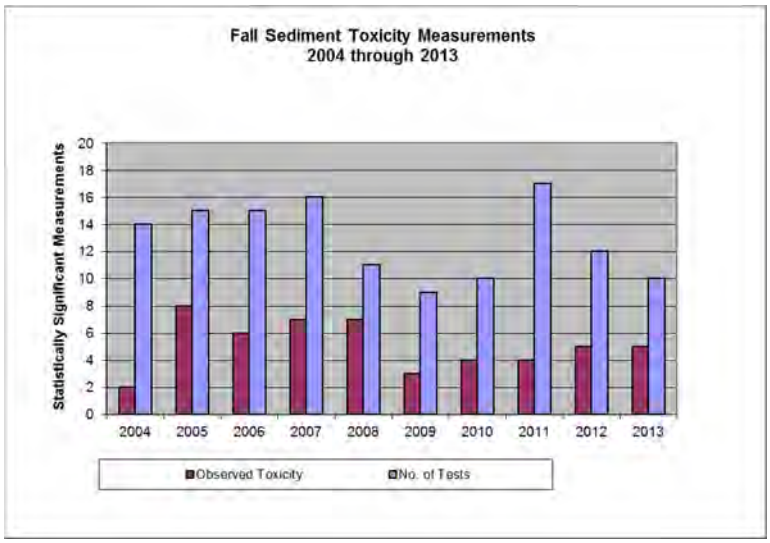


Figure 4 shows the number of statistically significant observations during the spring sediment sampling events. The fall 2013 sediment results showed the same number of sites with observed toxicity as the previous year. The Westside Coalition believes the best way to reduce sediment toxicity will be through the management of sediment discharges at the farm level, however the steep land slopes and erodible condition of the soil, particularly in the Patterson Subarea, continues to be a hurdle. Sedimentation ponds and tailwater return ponds, along with grower awareness of the issue will likely reduce the amount of sediment load leaving the farm and depositing in the waterways. The Coalition's Management Plan and Focused Watershed Plan include management approaches to address sediment toxicity. There appears to be an improving trend in sediment toxicity, possibly due to the Coalition's outreach efforts.

Figure 5: Percent Survival Trend.

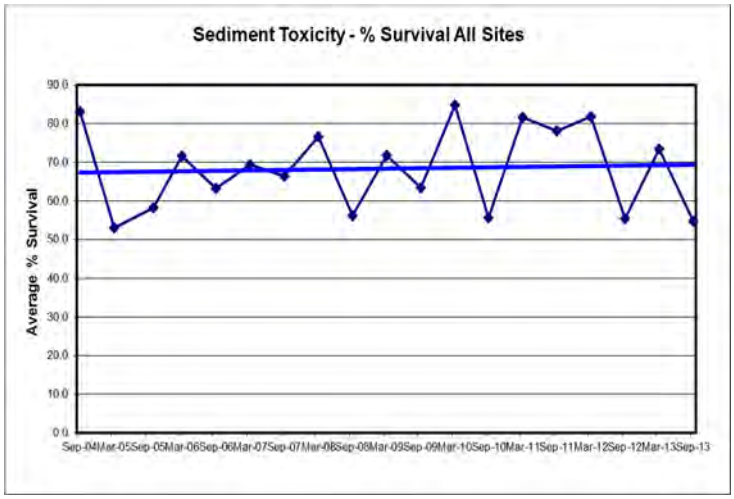


Figure 5 shows the trend of percent survival for sediment toxicity (average percent survival for all tested sites at each event), along with a linear trend line. Based on the trend line, there appears to be an improving trend in terms of the magnitude of survival, although the most recent toxicity results were not an improvement. Consistent with previous sediment toxicity data sets, it is also apparent that the magnitude of Fall survival is generally worse than that of Spring survival.

- **Aquatic Toxicity:** Aquatic toxicity to *Ceriodaphnia dubia*, fathead minnow, and algae were tested in accordance with the MRP Order (see **Attachment 7**). A total of 82 aquatic toxicity tests were performed, including 14 field duplicates. Only one incidence of

statistically significant toxicity (1.2%) was observed during the non-irrigation season; algae during Rain Event 14. **Attachment 2** provides monitoring results for all of the sites that measured significant toxicity, including a discussion of the TIE and dilution series findings.

- **Pesticide Analyses:** During this reporting period, five different pesticides were detected in water samples during the 2013/14 non-irrigation season for a total of 12 detections. Four of these detections exceeded the established RWQV (chlorpyrifos, diuron, and dimethoate); chlorpyrifos was detected at the Delta Mendota Canal at Del Puerto during event E108 and Diuron was detected there during event R14 as well; Diuron and dimethoate were detected at the Salt Slough at Sack Dam site during event R14. The diuron exceedance at the Salt Slough site is suspected to have contributed to the algae toxicity observed in the same sample set. See **Attachment 2**.

- **Chlorpyrifos and Diazinon TMDL Program:** In addition to its monthly monitoring program, the Westside Coalition also participates in the San Joaquin River Chlorpyrifos and Diazinon TMDL program. The Westside Coalition collects monthly water samples for chlorpyrifos and diazinon analysis at the San Joaquin River at Sack Dam, Lander Avenue, and Las Palmas Avenue (near the PID pumps) and collaborates with the Eastside Coalition in the development of the TMDL monitoring report and outreach activities. During this reporting period, neither chlorpyrifos nor diazinon were detected at any of the San Joaquin River monitoring sites sampled by the Westside Coalition. An annual monitoring report for the San Joaquin River Chlorpyrifos and Diazinon TMDL program covering October 2012 through September 2013 was submitted to the Central Valley Regional Water Quality Control Board in May 2014.

- **General Chemistry and Field Observations:** The monitoring results for field and general chemistry tests were generally similar to previous irrigation seasons. EC/TDS measured the largest number of exceedances for this reporting period (92 and 77 exceedances respectively). Bacteria (E Coli) was detected in 13 samples during the monitoring period. There were 15 exceedances for boron; boron is typically connected with shallow groundwater within the Westside San Joaquin Valley. Other constituent exceedances include dissolved oxygen (9 exceedances) and pH (17 exceedances). Dissolved cadmium, copper, lead, nickel, and zinc results were compared to the calculated RWQV (based on site water hardness) and no exceedances were measured during this reporting period. Ammonia (as N), arsenic, and selenium each had one detection as well. With many of these constituents, the source of the exceedance is neither clear nor easily traceable, and often can be found in the source water itself (such as the San Joaquin River at Sack Dam or the Delta-Mendota Canal).

SECTION 10: COMMUNICATION REPORTS

Exceedance reports were submitted to the Central Valley Regional Water Quality Control Board in response to monitoring results for the reporting period; they are included in **Appendix B.**

Follow-up included reporting statistically significant toxic events and exceedances of water quality values to the overlying districts, PCA's and to individual Coalition participants. The districts would then communicate with the affected growers to notify them that there is a problem. Meetings are then to be organized at the Coalition level as required to inform landowners, operators, PCA's, chemical applicators and others on monitoring results and likely best management measures that could be undertaken to minimize these problems (see **Table 14**).

SECTION 11: CONCLUSIONS AND RECOMMENDATIONS

The Westside Coalition's monitoring program has identified constituents of concern (see **Attachments 2** and **5**). The Westside Coalition has submitted a Management Plan and Focused Watershed Plan to address the water quality concerns discovered by previous monitoring. Implementation of these plans has begun.

As of the date of this report, the Westside Coalition monitoring program has accumulated data from 110 regularly scheduled monitoring events and 14 rain events. Data from this reporting period has verified previously identified water quality issues but has also showed some indications of an improving trend in water quality (see **Section 9**). The Westside Coalition began implementation of management plans in 2008. For a basis of comparison, data from the most recent three year period (March 2011 to February 2014) was compared to the three year period prior to management plan implementation (March 2005 to February 2008) and there are some promising improvements:

- Ceriodaphnia dubia toxicity: 19 exceedances out of 453 tests (4%) for the most current period, compared to 22 exceedances out of 382 tests (6%).
- Fathead minnow toxicity: 1 exceedances out of 258 tests (<1%) for the most current period, compared to 7 exceedances out of 385 tests (2%).
- Algae toxicity: 16 exceedances out of 312 tests (5%) for the most current period, compared to 32 exceedances out of 388 tests (8%).
- Chlorpyrifos: 36 exceedances out of 573 tests (6.3%) for the most current period compared to 66 exceedances out of 375 tests (17.6%).
- Diazinon: 9 exceedances out of 574 tests (1.6%) for the most current period compared to 9 exceedances out of 375 tests (2.4%).
- Total pesticide detections: Approximately 1.6% of analyzed pesticides detected in the current period versus 4.4% of analyzed pesticides detected in the period prior to management plan implementation.
- Sediment toxicity: 28 toxicity observations out of 79 tests (35%) in the current period compared to 45 observations out of 89 tests (51%).

A complete tally of exceedances by site and constituent is included in **Attachment 6**.

Attachment 1
Sampling Event Details

Event 106	Map	Caltest		APPL	PER				
September, 2013	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR				x				
Ingram Cr at River Road	ICARR	x			x				
Westley Wasteway near Cox Road	WWNCR	x			x				
Del Puerto Cr near Cox Road	DPCCR	x			x				
Del Puerto Cr at Hwy 33	DPCHW				x				
Ramona Lake near Fig Avenue	ROLFA	x			x				
Marshall Road Drain near River Road	MRDRR	x							
Orestimba Cr at River Road	OCARR	**No Flow**							
Orestimba Cr at Hwy 33	OCAHW								
Newman Wasteway near Hills Ferry Road	NWHFR								
San Joaquin River at Lander Avenue	SJRLA	x		x		x			
Mud Slough u/s San Luis Drain	MSUSL	x		x		x			
Salt Slough at Lander Avenue	SSALA	x				x			
Salt Slough at Sand Dam	SSASD				x				
Los Banos Creek at Highway 140	LBCHW	x	x	x		x		x	x
Los Banos Creek at China Camp Road	LBCCC	x			x				
Turner Slough near Edminster Road	TSAER	x							
Blewett Drain near Highway 132	VH132	x			x				
Poso Slough at Indiana Avenue	PSAIA	x			x				
San Joaquin River at Sack Dam	SJRSD	x	x	x					
San Joaquin River at PID Pumps	SJRPP	x	x	x					
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x					

Event 107	Map	Caltest		APPL	PER				
October, 2013	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR								
Ingram Cr at River Road	ICARR	x							
Westley Wasteway near Cox Road	WWNCR	x							
Del Puerto Cr near Cox Road	DPCCR	x							
Del Puerto Cr at Hwy 33	DPCHW								
Ramona Lake near Fig Avenue	ROLFA	x							
Marshall Road Drain near River Road	MRDRR	x							
Orestimba Cr at River Road	OCARR	x							
Orestimba Cr at Hwy 33	OCAHW								
Newman Wasteway near Hills Ferry Road	NWHFR	x							
San Joaquin River at Lander Avenue	SJRLA	x		x		x			
Mud Slough u/s San Luis Drain	MSUSL	x		x		x			
Salt Slough at Lander Avenue	SSALA	x		x		x			
Salt Slough at Sand Dam	SSASD								
Los Banos Creek at Highway 140	LBCHW	x	x	x		x		x	x
Los Banos Creek at China Camp Road	LBCCC	x							
Turner Slough near Edminster Road	TSAER	x							
Blewett Drain near Highway 132	VH132	x							
Poso Slough at Indiana Avenue	PSAIA	x							
San Joaquin River at Sack Dam	SJRSD	x	x	x					
San Joaquin River at PID Pumps	SJRPP	x	x	x					
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x					

Event 108	Map	Caltest		APPL	PER				
November, 2013	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR		x	x		x		x	
Ingram Cr at River Road	ICARR	**No Flow**							
Westley Wasteway near Cox Road	WWNCR	x							
Del Puerto Cr near Cox Road	DPCCR	x							
Del Puerto Cr at Hwy 33	DPCHW								
Ramona Lake near Fig Avenue	ROLFA	x							
Marshall Road Drain near River Road	MRDRR	x							
Orestimba Cr at River Road	OCARR	x							
Orestimba Cr at Hwy 33	OCAHW								
Newman Wasteway near Hills Ferry Road	NWHFR	x							
San Joaquin River at Lander Avenue	SJRLA	x		x		x			
Mud Slough u/s San Luis Drain	MSUSL	x		x		x			
Salt Slough at Lander Avenue	SSALA	x		x		x			
Salt Slough at Sand Dam	SSASD								
Los Banos Creek at Highway 140	LBCHW	x	x	x		x		x	x
Los Banos Creek at China Camp Road	LBCCC	x							
Turner Slough near Edminster Road	TSAER	x							
Blewett Drain near Highway 132	VH132	**No Flow**							
Poso Slough at Indiana Avenue	PSAIA	x							
San Joaquin River at Sack Dam	SJRSD	x	x	x					
San Joaquin River at PID Pumps	SJRPP	x	x	x					
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x					

Event 109	Map	Caltest		APPL	PER				
December, 2013	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR								
Ingram Cr at River Road	ICARR	**No Flow**							
Westley Wasteway near Cox Road	WWNCR	x							
Del Puerto Cr near Cox Road	DPCCR	x							
Del Puerto Cr at Hwy 33	DPCHW								
Ramona Lake near Fig Avenue	ROLFA	x							
Marshall Road Drain near River Road	MRDRR	x							
Orestimba Cr at River Road	OCARR	**No Flow**							
Orestimba Cr at Hwy 33	OCAHW								
Newman Wasteway near Hills Ferry Road	NWHFR	x							
San Joaquin River at Lander Avenue	SJRLA	x		x		x			
Mud Slough u/s San Luis Drain	MSUSL	x		x		x			
Salt Slough at Lander Avenue	SSALA	x		x		x			
Salt Slough at Sand Dam	SSASD								
Los Banos Creek at Highway 140	LBCHW	x	x	x		x		x	x
Los Banos Creek at China Camp Road	LBCCC	x							
Turner Slough near Edminster Road	TSAER	x							
Blewett Drain near Highway 132	VH132	**No Flow**							
Poso Slough at Indiana Avenue	PSAIA	x							
San Joaquin River at Sack Dam	SJRSD	x	x	x					
San Joaquin River at PID Pumps	SJRPP	x	x	x					
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x					

Event 110	Map	Caltest		APPL	PER				
January, 2014	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR								
Ingram Cr at River Road	ICARR	**No Flow**							
Westley Wasteway near Cox Road	WWNCR	x							
Del Puerto Cr near Cox Road	DPCCR	x							
Del Puerto Cr at Hwy 33	DPCHW								
Ramona Lake near Fig Avenue	ROLFA	x							
Marshall Road Drain near River Road	MRDRR	x							
Orestimba Cr at River Road	OCARR	x							
Orestimba Cr at Hwy 33	OCAHW								
Newman Wasteway near Hills Ferry Road	NWHFR	x							
San Joaquin River at Lander Avenue	SJRLA	x		x		x			
Mud Slough u/s San Luis Drain	MSUSL	x		x		x			
Salt Slough at Lander Avenue	SSALA	x		x		x			
Salt Slough at Sand Dam	SSASD								
Los Banos Creek at Highway 140	LBCHW	x	x	x		x		x	x
Los Banos Creek at China Camp Road	LBCCC	x							
Turner Slough near Edminster Road	TSAER	x							
Blewett Drain near Highway 132	VH132	x							
Poso Slough at Indiana Avenue	PSAIA	x							
San Joaquin River at Sack Dam	SJRSD	x	x	x					
San Joaquin River at PID Pumps	SJRPP	x	x	x					
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x					

Rain Event 14	Map	Caltest		APPL	PER				
February, 2014	Desig.	Gen Phy	metals	Pest	Sed Tox	CD Tox	PP Tox	SC Tox	Dup?
Hospital Cr at River Road	HCARR	**No Flow**							
Ingram Cr at River Road	ICARR	**No Flow**							
Westley Wasteway near Cox Road	WWNCR	**No Flow**							
Del Puerto Cr near Cox Road	DPCCR	x	x	x		x	x	x	
Del Puerto Cr at Hwy 33	DPCHW	**No Flow**							
Ramona Lake near Fig Avenue	ROLFA	**No Flow**							
Marshall Road Drain near River Road	MRDRR	**No Flow**							
Orestimba Cr at River Road	OCARR	**No Flow**							
Orestimba Cr at Hwy 33	OCAHW	x	x	x		x	x	x	
Newman Wasteway near Hills Ferry Road	NWHFR	x	x	x		x	x	x	
San Joaquin River at Lander Avenue	SJRLA	x	x	x		x	x	x	
Mud Slough u/s San Luis Drain	MSUSL	x	x	x		x	x	x	
Salt Slough at Lander Avenue	SSALA	x	x	x		x	x	x	
Salt Slough at Sand Dam	SSASD	x	x	x		x	x	x	
Los Banos Creek at Highway 140	LBCHW	x	x	x		x	x	x	
Los Banos Creek at China Camp Road	LBCCC	x	x	x		x	x	x	
Turner Slough near Edminster Road	TSAER	x	x	x		x	x	x	
Blewett Drain near Highway 132	VH132	**No Flow**							
Poso Slough at Indiana Avenue	PSAIA	x	x	x		x	x	x	x
San Joaquin River at Sack Dam	SJRSD	x	x	x		x	x	x	
San Joaquin River at PID Pumps	SJRPP	x	x	x		x	x	x	
Delta Mendota Canal at Del Puerto WD	DMCDP	x	x	x		x	x	x	

Attachment 2
Significant Aquatic Toxicity Results

Westside San Joaquin River Watershed Coalition
Significant Aquatic Toxicity Results

Monitoring Site	Sample Date	Event	Reactive Species	Results	Control Results	Percent Difference	Units
Salt Slough at Sand Dam	2/10/2014	R14	Selenastrum capricornutum	1,080,000	2,510,000	57%	cells/ml

Followup:

Field Data

DO	6.93	mg/l
EC	1172	µmhos/cm
Est Depth		ft
Flow		cfs
pH	7.48	
Staff Gage		ft
Temp	14.38	c

Water Chemistry

Bromide	0.51	DNQ	mg/L
Dissolved Organic Carbon	3		mg/L
Dissolved Organic Carbon	3.2		mg/L
E. coli	27.5		MPN/100
Total Organic Carbon	2.9		mg/L
Hardness as CaCO3	250		mg/L
Total Dissolved Solids	720		mg/L
Total Suspended Solids	48		mg/L
Turbidity	32		NTU
Arsenic	4.3		ug/L
Boron	270		ug/L
Cadmium	-0.05	ND	ug/L
Copper	0.81		ug/L
Copper	2.6		ug/L
Lead	0.74		ug/L
Lead	-0.03	ND	ug/L
Nickel	3.5		ug/L
Nickel	1.2		ug/L
Selenium	0.57	DNQ	ug/L
Zinc	7.3		ug/L
Zinc	1.8		ug/L
Ammonia as N	0.32		mg/L
Nitrate + Nitrite as N	1.5		mg/L
Nitrogen, Total Kjeldahl	1.2		mg/L
OrthoPhosphate as P	0.27		mg/L

Detected Pesticides

Dimethoate	1.3	=
Diuron	5.6	=

DNQ = Estimated value, below reporting limit.
Y = % Difference primary and confirmation column is >40%.
B = Constituent also detected in blank sample.

Attachment 3
Field Quality Control Sample Results

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Sample Date: 9/10/2013	**Site: Los Banos Creek at Hwy 140**							
Ammonia as N	General Chemistry	0.29		0.25		mg/L	15%	
Arsenic	General Chemistry	5.6		5.4		ug/L	4%	
Boron	General Chemistry	510		490		ug/L	4%	
Bromide	General Chemistry	0.36	DNQ	0.36	DNQ	mg/L	0%	
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	5.7		5.6		ug/L	2%	
Copper (Dissolved)	General Chemistry	2.2		3.2		ug/L	37%	*
Dissolved Organic Carbon	General Chemistry	5.4		5.1		mg/L	6%	
E. coli	General Chemistry	-1	ND	131.4		MPN/100 mL	NA	
Hardness as CaCO3	General Chemistry	230		230		mg/L	0%	
Lead	General Chemistry	1.6		1.6		ug/L	0%	
Lead (Dissolved)	General Chemistry	-0.03	ND	-0.03	ND	ug/L	NA	
Nickel	General Chemistry	14		14		ug/L	0%	
Nickel (Dissolved)	General Chemistry	3.8		3.8		ug/L	0%	
Nitrate + Nitrite as N	General Chemistry	0.71		0.69		mg/L	3%	
Nitrogen, Total Kjeldahl	General Chemistry	1.8		1.8		mg/L	0%	
OrthoPhosphate as P	General Chemistry	0.13		0.13		mg/L	0%	
Selenium	General Chemistry	0.49	DNQ	0.45	DNQ	ug/L	9%	
Total Dissolved Solids	General Chemistry	560		560		mg/L	0%	
Total Organic Carbon	General Chemistry	5.7		5.5		mg/L	4%	
Total Suspended Solids	General Chemistry	72		74		mg/L	3%	
Turbidity	General Chemistry	50		45		NTU	11%	
Zinc	General Chemistry	11		11		ug/L	0%	
Zinc (Dissolved)	General Chemistry	-0.5	ND	-0.5	ND	ug/L	NA	
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA	
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA	
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA	
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA	
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA	
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA	
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA	
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	

Sample Date: 10/8/2013 Site: Los Banos Creek at Hwy 140

Ammonia as N	General Chemistry	0.14		0.099	DNQ	mg/L	34%	*
Arsenic	General Chemistry	5.4		5.4		ug/L	0%	
Boron	General Chemistry	440		450		ug/L	2%	
Bromide	General Chemistry	0.26	DNQ	0.27	DNQ	mg/L	4%	
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	1.8		1.8		ug/L	0%	
Copper (Dissolved)	General Chemistry	0.81		0.79		ug/L	3%	
Dissolved Organic Carbon	General Chemistry	7.6		7.4		mg/L	3%	
E. coli	General Chemistry	228.2		172.3		MPN/100 mL	28%	*
Hardness as CaCO3	General Chemistry	200		200		mg/L	0%	
Lead	General Chemistry	0.35		0.35		ug/L	0%	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Lead (Dissolved)	General Chemistry	0.09	DNQ	0.09	DNQ	ug/L	0%	
Nickel	General Chemistry	4.2		4.3		ug/L	2%	
Nickel (Dissolved)	General Chemistry	2.3		2.1		ug/L	9%	
Nitrate + Nitrite as N	General Chemistry	0.091		0.068		mg/L	29%	*
Nitrogen, Total Kjeldahl	General Chemistry	1.1		0.97		mg/L	13%	
OrthoPhosphate as P	General Chemistry	0.43		0.43		mg/L	0%	
Phosphate as P	General Chemistry	0.58		0.57		mg/L	2%	
Selenium	General Chemistry	0.23	DNQ	0.25	DNQ	ug/L	8%	
Total Dissolved Solids	General Chemistry	510		520		mg/L	2%	
Total Organic Carbon	General Chemistry	8.1		8		mg/L	1%	
Total Suspended Solids	General Chemistry	2	DNQ	3		mg/L	40%	*
Turbidity	General Chemistry	9.5		9.8		NTU	3%	
Zinc	General Chemistry	2.1		2.5		ug/L	17%	
Zinc (Dissolved)	General Chemistry	-0.5	ND	-0.5	ND	ug/L	NA	
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA	
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA	
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA	
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA	
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA	
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA	
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA	
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA	
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	
Sample Date: 11/12/2013 Site: Los Banos Creek at Hwy 140								
Ammonia as N	General Chemistry	0.3		0.24		mg/L	22%	
Arsenic	General Chemistry	5.8		5.6		ug/L	4%	
Boron	General Chemistry	730		710		ug/L	3%	
Bromide	General Chemistry	0.33	DNQ	0.39	DNQ	mg/L	17%	
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	1.3		1.3		ug/L	0%	
Copper (Dissolved)	General Chemistry	0.46	DNQ	0.41	DNQ	ug/L	11%	
Dissolved Organic Carbon	General Chemistry	10		11		mg/L	10%	
E. coli	General Chemistry	307.6		435.2		MPN/100 mL	34%	*
Hardness as CaCO3	General Chemistry	280		280		mg/L	0%	
Lead	General Chemistry	0.34		0.32		ug/L	6%	
Lead (Dissolved)	General Chemistry	0.05	DNQ	0.06	DNQ	ug/L	18%	
Nickel	General Chemistry	4.7		4.6		ug/L	2%	
Nickel (Dissolved)	General Chemistry	3.2		3.3		ug/L	3%	
Nitrate + Nitrite as N	General Chemistry	0.095		0.098		mg/L	3%	
Nitrogen, Total Kjeldahl	General Chemistry	1.3		1.3		mg/L	0%	
OrthoPhosphate as P	General Chemistry	0.43		0.43		mg/L	0%	
Selenium	General Chemistry	0.22	DNQ	0.23	DNQ	ug/L	4%	
Total Dissolved Solids	General Chemistry	730		730		mg/L	0%	
Total Organic Carbon	General Chemistry	13		12		mg/L	8%	
Total Suspended Solids	General Chemistry	7		8		mg/L	13%	
Turbidity	General Chemistry	10		9.6		NTU	4%	
Zinc	General Chemistry	1.4		1.3		ug/L	7%	
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	

Sample Date: 12/10/2013 Site: Los Banos Creek at Hwy 140

Ammonia as N	General Chemistry	0.16		0.15		mg/L	6%	
Arsenic	General Chemistry	4.6		4.7		ug/L	2%	
Boron	General Chemistry	970		1000		ug/L	3%	
Bromide	General Chemistry	0.17	DNQ	0.21	DNQ	mg/L	21%	
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	1.4		1.4		ug/L	0%	
Copper (Dissolved)	General Chemistry	0.78		0.79		ug/L	1%	
Dissolved Organic Carbon	General Chemistry	19		18		mg/L	5%	
E. coli	General Chemistry	2400	>	2400	>	MPN/100 mL	0%	
Hardness as CaCO3	General Chemistry	290		300		mg/L	3%	
Lead	General Chemistry	0.27		0.27		ug/L	0%	
Lead (Dissolved)	General Chemistry	0.09	DNQ	0.07	DNQ	ug/L	25%	*
Nickel	General Chemistry	4.6		4.6		ug/L	0%	
Nickel (Dissolved)	General Chemistry	3.6		3.6		ug/L	0%	
Nitrate + Nitrite as N	General Chemistry	0.2		0.31		mg/L	43%	*
Nitrogen, Total Kjeldahl	General Chemistry	1.3		1.1		mg/L	17%	
OrthoPhosphate as P	General Chemistry	0.27		0.26		mg/L	4%	
Selenium	General Chemistry	0.23	DNQ	0.24	DNQ	ug/L	4%	
Total Dissolved Solids	General Chemistry	790		810		mg/L	3%	
Total Organic Carbon	General Chemistry	19		19		mg/L	0%	
Total Suspended Solids	General Chemistry	5		5		mg/L	0%	
Turbidity	General Chemistry	6.4		6.5		NTU	2%	
Zinc	General Chemistry	1.7		1.6		ug/L	6%	
Zinc (Dissolved)	General Chemistry	-0.7	ND	0.7	DNQ	ug/L	NA	
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA	
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA	
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA	
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA	
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA	
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA	
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA	
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	
Sample Date: 1/14/2014	**Site: Los Banos Creek at Hwy 140**							
Ammonia as N	General Chemistry	0.2		0.2		mg/L	0%	
Arsenic	General Chemistry	10		10		ug/L	0%	
Boron	General Chemistry	3200		3100		ug/L	3%	
Bromide	General Chemistry	1.2		1.2		mg/L	0%	
Cadmium	General Chemistry	0.08	DNQ	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	0.06	DNQ	-0.05	ND	ug/L	NA	
Copper	General Chemistry	0.87		0.86		ug/L	1%	
Copper (Dissolved)	General Chemistry	0.53		0.54		ug/L	2%	
Dissolved Organic Carbon	General Chemistry	7.8		7.3		mg/L	7%	
E. coli	General Chemistry	307.6		93.5		MPN/100 mL	107%	*

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Hardness as CaCO3	General Chemistry	860		830		mg/L	4%	
Lead	General Chemistry	0.14	DNQ	0.1	DNQ	ug/L	33%	*
Lead (Dissolved)	General Chemistry	-0.03	ND	-0.03	ND	ug/L	NA	
Nickel	General Chemistry	4.4		4		ug/L	10%	
Nickel (Dissolved)	General Chemistry	3.3		3.3		ug/L	0%	
Nitrate + Nitrite as N	General Chemistry	-0.02	ND	-0.02	ND	mg/L	NA	
Nitrogen, Total Kjeldahl	General Chemistry	0.84		0.97		mg/L	14%	
OrthoPhosphate as P	General Chemistry	0.41		0.41		mg/L	0%	
Selenium	General Chemistry	0.27	DNQ	0.19	DNQ	ug/L	35%	*
Total Dissolved Solids	General Chemistry	2800		2800		mg/L	0%	
Total Organic Carbon	General Chemistry	7.9		7.9		mg/L	0%	
Total Suspended Solids	General Chemistry	7		14		mg/L	67%	*
Turbidity	General Chemistry	5.6		5.6		NTU	0%	
Zinc	General Chemistry	2.3		1.1		ug/L	71%	*
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA	
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA	
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA	
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA	
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA	
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA	
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA	
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA	
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA	
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	

Sample Date: 2/10/2014 Site: Poso Slough at Indiana Ave

Ammonia as N	General Chemistry	0.23		0.16		mg/L	36%	*
Arsenic	General Chemistry	7		7.4		ug/L	6%	
Boron	General Chemistry	390		390		ug/L	0%	
Bromide	General Chemistry	0.4	DNQ	0.36	DNQ	mg/L	11%	
Cadmium	General Chemistry	0.09	DNQ	0.11		ug/L	20%	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	7.8		9		ug/L	14%	
Copper (Dissolved)	General Chemistry	1.1		1		ug/L	10%	
Dissolved Organic Carbon	General Chemistry	4.2		4.1		mg/L	2%	
Dissolved Organic Carbon	General Chemistry	5.4		4.1		mg/L	27%	*
E. coli	General Chemistry	52		63.7		MPN/100 mL	20%	
Hardness as CaCO3	General Chemistry	250		250		mg/L	0%	
Lead	General Chemistry	2.9		3.5		ug/L	19%	
Lead (Dissolved)	General Chemistry	-0.03	ND	0.06	DNQ	ug/L	NA	
Nickel	General Chemistry	10		12		ug/L	18%	
Nickel (Dissolved)	General Chemistry	1.5		1.6		ug/L	6%	
Nitrate + Nitrite as N	General Chemistry	0.15		0.14		mg/L	7%	
Nitrogen, Total Kjeldahl	General Chemistry	1.8		1.3		mg/L	32%	*
OrthoPhosphate as P	General Chemistry	0.091		0.067		mg/L	30%	*
Selenium	General Chemistry	0.63	DNQ	0.66	DNQ	ug/L	5%	
Total Dissolved Solids	General Chemistry	660		650		mg/L	2%	
Total Organic Carbon	General Chemistry	4		4		mg/L	0%	
Total Suspended Solids	General Chemistry	200		234		mg/L	16%	
Turbidity	General Chemistry	85		120		NTU	34%	*

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Duplicate and RPD Calculation

Analyte/Species	Type	Event	QC Code	FD	QC Code	Units	RPD
Zinc	General Chemistry	23		28		ug/L	20%
Zinc (Dissolved)	General Chemistry	-0.7	ND	0.9	DNQ	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA

Event = Event Sample Results FD = Field Duplicate Sample Results RPD = Relative percent difference

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Sample Date: 9/10/2013 Site: Los Banos Creek at Hwy 140							
Ammonia as N	General Chemistry	0.29		-0.04	ND	mg/L	NA
Arsenic	General Chemistry	5.6		-0.06	ND	ug/L	NA
Boron	General Chemistry	510		-2	ND	ug/L	NA
Bromide	General Chemistry	0.36	DNQ	-0.03	ND	mg/L	NA
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Copper	General Chemistry	5.7		-0.07	ND	ug/L	NA
Copper (Dissolved)	General Chemistry	2.2		-0.07	ND	ug/L	NA
Dissolved Organic Carbon	General Chemistry	5.4		0.47	DNQ	mg/L	91%
E. coli	General Chemistry	-1	ND	-1	ND	MPN/100 mL	NA
Hardness as CaCO3	General Chemistry	230		-1.7	ND	mg/L	NA
Lead	General Chemistry	1.6		-0.03	ND	ug/L	NA
Lead (Dissolved)	General Chemistry	-0.03	ND	-0.03	ND	ug/L	NA
Nickel	General Chemistry	14		-0.06	ND	ug/L	NA
Nickel (Dissolved)	General Chemistry	3.8		-0.06	ND	ug/L	NA
Nitrate + Nitrite as N	General Chemistry	0.71		-0.02	ND	mg/L	NA
Nitrogen, Total Kjeldahl	General Chemistry	1.8		0.13		mg/L	93%
Nitrogen, Total Kjeldahl	General Chemistry	1.8		-0.07	ND	mg/L	NA
OrthoPhosphate as P	General Chemistry	0.13		-0.006	ND	mg/L	NA
Selenium	General Chemistry	0.49	DNQ	-0.06	ND	ug/L	NA
Total Dissolved Solids	General Chemistry	560		-4	ND	mg/L	NA
Total Organic Carbon	General Chemistry	5.7		0.37	DNQ	mg/L	94%
Total Suspended Solids	General Chemistry	72		-2	ND	mg/L	NA
Turbidity	General Chemistry	50		-0.03	ND	NTU	NA
Zinc	General Chemistry	11		-0.7	ND	ug/L	NA
Zinc (Dissolved)	General Chemistry	-0.5	ND	-0.5	ND	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA
Sample Date: 10/8/2013 Site: Los Banos Creek at Hwy 140							
Ammonia as N	General Chemistry	0.14		-0.04	ND	mg/L	NA
Arsenic	General Chemistry	5.4		-0.06	ND	ug/L	NA
Boron	General Chemistry	440		2.2	DNQ	ug/L	100%
Bromide	General Chemistry	0.26	DNQ	-0.03	ND	mg/L	NA
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Copper	General Chemistry	1.8		-0.07	ND	ug/L	NA
Copper (Dissolved)	General Chemistry	0.81		-0.07	ND	ug/L	NA
Dissolved Organic Carbon	General Chemistry	7.6		-0.3	ND	mg/L	NA
E. coli	General Chemistry	228.2		-1	ND	MPN/100 mL	NA
Hardness as CaCO3	General Chemistry	200		-1.7	ND	mg/L	NA
Lead	General Chemistry	0.35		-0.03	ND	ug/L	NA
Lead (Dissolved)	General Chemistry	0.09	DNQ	-0.03	ND	ug/L	NA
Nickel	General Chemistry	4.2		-0.06	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Nickel (Dissolved)	General Chemistry	2.3		-0.06	ND	ug/L	NA
Nitrate + Nitrite as N	General Chemistry	0.091		-0.02	ND	mg/L	NA
Nitrogen, Total Kjeldahl	General Chemistry	1.1		-0.07	ND	mg/L	NA
OrthoPhosphate as P	General Chemistry	0.43		-0.006	ND	mg/L	NA
Phosphate as P	General Chemistry	0.58		-0.007	ND	mg/L	NA
Selenium	General Chemistry	0.23	DNQ	-0.06	ND	ug/L	NA
Total Dissolved Solids	General Chemistry	510		-4	ND	mg/L	NA
Total Organic Carbon	General Chemistry	8.1		-0.3	ND	mg/L	NA
Total Suspended Solids	General Chemistry	2	DNQ	-2	ND	mg/L	NA
Turbidity	General Chemistry	9.5		-0.03	ND	NTU	NA
Zinc	General Chemistry	2.1		-0.7	ND	ug/L	NA
Zinc (Dissolved)	General Chemistry	-0.5	ND	-0.5	ND	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	
Sample Date: 11/12/2013 Site: Los Banos Creek at Hwy 140								
Ammonia as N	General Chemistry	0.3		-0.04	ND	mg/L	NA	
Arsenic	General Chemistry	5.8		-0.06	ND	ug/L	NA	
Boron	General Chemistry	730		-2	ND	ug/L	NA	
Bromide	General Chemistry	0.33	DNQ	-0.03	ND	mg/L	NA	
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA	
Copper	General Chemistry	1.3		0.36	DNQ	ug/L	72%	*
Copper (Dissolved)	General Chemistry	0.46	DNQ	0.22	DNQ	ug/L	52%	*
Dissolved Organic Carbon	General Chemistry	10		0.73		mg/L	93%	
E. coli	General Chemistry	307.6		-1	ND	MPN/100 mL	NA	
Hardness as CaCO3	General Chemistry	280		-1.7	ND	mg/L	NA	
Lead	General Chemistry	0.34		-0.03	ND	ug/L	NA	
Lead (Dissolved)	General Chemistry	0.05	DNQ	-0.03	ND	ug/L	NA	
Nickel	General Chemistry	4.7		0.08	DNQ	ug/L	98%	
Nickel (Dissolved)	General Chemistry	3.2		-0.06	ND	ug/L	NA	
Nitrate + Nitrite as N	General Chemistry	0.095		-0.02	ND	mg/L	NA	
Nitrogen, Total Kjeldahl	General Chemistry	1.3		-0.07	ND	mg/L	NA	
OrthoPhosphate as P	General Chemistry	0.43		-0.006	ND	mg/L	NA	
Selenium	General Chemistry	0.22	DNQ	-0.06	ND	ug/L	NA	
Total Dissolved Solids	General Chemistry	730		-4	ND	mg/L	NA	
Total Organic Carbon	General Chemistry	13		0.52		mg/L	96%	
Total Suspended Solids	General Chemistry	7		-2	ND	mg/L	NA	
Turbidity	General Chemistry	10		-0.03	ND	NTU	NA	
Zinc	General Chemistry	1.4		-0.7	ND	ug/L	NA	
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA	
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA	
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA	
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference	
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA	
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA	
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA	
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA	
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA	
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA	
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA	
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	

Sample Date: 12/10/2013 Site: Los Banos Creek at Hwy 140

Ammonia as N	General Chemistry	0.16	0.044	DNQ	mg/L	73%	*
Arsenic	General Chemistry	4.6	-0.06	ND	ug/L	NA	

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Boron	General Chemistry	970		-2	ND	ug/L	NA
Bromide	General Chemistry	0.17	DNQ	-0.03	ND	mg/L	NA
Cadmium	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Copper	General Chemistry	1.4		-0.07	ND	ug/L	NA
Copper (Dissolved)	General Chemistry	0.78		-0.07	ND	ug/L	NA
Dissolved Organic Carbon	General Chemistry	19		-0.3	ND	mg/L	NA
E. coli	General Chemistry	2400	>	-1	ND	MPN/100 mL	NA
Hardness as CaCO3	General Chemistry	290		-1.7	ND	mg/L	NA
Lead	General Chemistry	0.27		-0.03	ND	ug/L	NA
Lead (Dissolved)	General Chemistry	0.09	DNQ	-0.03	ND	ug/L	NA
Nickel	General Chemistry	4.6		-0.06	ND	ug/L	NA
Nickel (Dissolved)	General Chemistry	3.6		-0.06	ND	ug/L	NA
Nitrate + Nitrite as N	General Chemistry	0.2		-0.02	ND	mg/L	NA
Nitrogen, Total Kjeldahl	General Chemistry	1.3		-0.07	ND	mg/L	NA
OrthoPhosphate as P	General Chemistry	0.27		-0.006	ND	mg/L	NA
Selenium	General Chemistry	0.23	DNQ	-0.06	ND	ug/L	NA
Total Dissolved Solids	General Chemistry	790		-4	ND	mg/L	NA
Total Organic Carbon	General Chemistry	19		-0.3	ND	mg/L	NA
Total Suspended Solids	General Chemistry	5		-2	ND	mg/L	NA
Turbidity	General Chemistry	6.4		-0.03	ND	NTU	NA
Zinc	General Chemistry	1.7		-0.7	ND	ug/L	NA
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference	
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA	
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA	
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA	
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA	
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA	
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA	
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA	
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA	
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA	
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA	
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA	
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA	
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA	
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA	
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA	
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA	
Sample Date: 1/14/2014 Site: Los Banos Creek at Hwy 140								
Ammonia as N	General Chemistry	0.2		0.044	DNQ	mg/L	78%	*
Arsenic	General Chemistry	10		-0.06	ND	ug/L	NA	
Boron	General Chemistry	3200		-2	ND	ug/L	NA	
Bromide	General Chemistry	1.2		-0.03	ND	mg/L	NA	
Cadmium	General Chemistry	0.08	DNQ	-0.05	ND	ug/L	NA	
Cadmium (Dissolved)	General Chemistry	0.06	DNQ	-0.05	ND	ug/L	NA	
Copper	General Chemistry	0.87		-0.07	ND	ug/L	NA	
Copper (Dissolved)	General Chemistry	0.53		-0.07	ND	ug/L	NA	
Dissolved Organic Carbon	General Chemistry	7.8		0.32	DNQ	mg/L	96%	
E. coli	General Chemistry	307.6		-1	ND	MPN/100 mL	NA	
Hardness as CaCO3	General Chemistry	860		-1.7	ND	mg/L	NA	
Lead	General Chemistry	0.14	DNQ	-0.03	ND	ug/L	NA	
Lead (Dissolved)	General Chemistry	-0.03	ND	-0.03	ND	ug/L	NA	
Nickel	General Chemistry	4.4		-0.06	ND	ug/L	NA	
Nickel (Dissolved)	General Chemistry	3.3		-0.06	ND	ug/L	NA	
Nitrate + Nitrite as N	General Chemistry	-0.02	ND	-0.02	ND	mg/L	NA	
Nitrogen, Total Kjeldahl	General Chemistry	0.84		-0.07	ND	mg/L	NA	
OrthoPhosphate as P	General Chemistry	0.41		-0.006	ND	mg/L	NA	
Selenium	General Chemistry	0.27	DNQ	-0.06	ND	ug/L	NA	

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Total Dissolved Solids	General Chemistry	2800		5	DNQ	mg/L	100%
Total Organic Carbon	General Chemistry	7.9		-0.3	ND	mg/L	NA
Total Suspended Solids	General Chemistry	7		-2	ND	mg/L	NA
Turbidity	General Chemistry	5.6		-0.03	ND	NTU	NA
Zinc	General Chemistry	2.3		-0.7	ND	ug/L	NA
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
HCH, alpha	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, beta	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
HCH, delta	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
HCH, gamma	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA
Prowl	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA
Sample Date: 2/10/2014 Site: Poso Slough at Indiana Ave							
Ammonia as N	General Chemistry	0.23		-0.04	ND	mg/L	NA
Arsenic	General Chemistry	7		-0.06	ND	ug/L	NA
Boron	General Chemistry	390		-2	ND	ug/L	NA
Bromide	General Chemistry	0.4	DNQ	-0.03	ND	mg/L	NA
Cadmium	General Chemistry	0.09	DNQ	-0.05	ND	ug/L	NA
Cadmium (Dissolved)	General Chemistry	-0.05	ND	-0.05	ND	ug/L	NA
Copper	General Chemistry	7.8		0.27	DNQ	ug/L	97%
Copper (Dissolved)	General Chemistry	1.1		0.2	DNQ	ug/L	82%
Dissolved Organic Carbon	General Chemistry	4.2		-0.3	ND	mg/L	NA
Dissolved Organic Carbon	General Chemistry	5.4		-0.3	ND	mg/L	NA
E. coli	General Chemistry	52		-1	ND	MPN/100 mL	NA
Hardness as CaCO3	General Chemistry	250		-1.7	ND	mg/L	NA
Lead	General Chemistry	2.9		-0.03	ND	ug/L	NA
Lead (Dissolved)	General Chemistry	-0.03	ND	-0.03	ND	ug/L	NA
Nickel	General Chemistry	10		-0.06	ND	ug/L	NA
Nickel (Dissolved)	General Chemistry	1.5		-0.06	ND	ug/L	NA
Nitrate + Nitrite as N	General Chemistry	0.15		-0.02	ND	mg/L	NA
Nitrogen, Total Kjeldahl	General Chemistry	1.8		-0.07	ND	mg/L	NA
OrthoPhosphate as P	General Chemistry	0.091		-0.006	ND	mg/L	NA
Selenium	General Chemistry	0.63	DNQ	-0.06	ND	ug/L	NA
Total Dissolved Solids	General Chemistry	660		-4	ND	mg/L	NA
Total Organic Carbon	General Chemistry	4		-0.3	ND	mg/L	NA
Total Suspended Solids	General Chemistry	200		-2	ND	mg/L	NA
Turbidity	General Chemistry	85		-0.03	ND	NTU	NA
Zinc	General Chemistry	23		-0.7	ND	ug/L	NA
Zinc (Dissolved)	General Chemistry	-0.7	ND	-0.7	ND	ug/L	NA
Aldicarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Aldrin	Pesticide	-0.009	ND	-0.009	ND	ug/L	NA
Atrazine	Pesticide	-0.07	ND	-0.07	ND	ug/L	NA
Azinphos methyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Carbaryl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Carbofuran	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Chlorpyrifos	Pesticide	-0.0026	ND	-0.0026	ND	ug/L	NA
Cyanazine	Pesticide	-0.09	ND	-0.09	ND	ug/L	NA
DDD(p,p')	Pesticide	-0.003	ND	-0.003	ND	ug/L	NA
DDE(p,p')	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Field Quality Control Samples

Field Blank

Analyte/Species	Type	Event	QC Code	FB	QC Code	Units	% Difference
DDT(p,p')	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Demeton-s	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Diazinon	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Dichlorvos	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Dicofol	Pesticide	-0.01	ND	-0.01	ND	ug/L	NA
Dieldrin	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Dimethoate	Pesticide	-0.080	ND	-0.080	ND	ug/L	NA
Disulfoton	Pesticide	-0.020	ND	-0.020	ND	ug/L	NA
Diuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Endosulfan I	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endosulfan II	Pesticide	-0.004	ND	-0.004	ND	ug/L	NA
Endosulfan Sulfate	Pesticide	-0.005	ND	-0.005	ND	ug/L	NA
Endrin	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
EPTC	Pesticide	-0.03	ND	-0.03	ND	ug/L	NA
Heptachlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Heptachlor epoxide	Pesticide	-0.007	ND	-0.007	ND	ug/L	NA
Linuron	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Malathion	Pesticide	-0.030	ND	-0.030	ND	ug/L	NA
Methamidophos	Pesticide	-0.10	ND	-0.10	ND	ug/L	NA
Methidathion	Pesticide	-0.04	ND	-0.04	ND	ug/L	NA
Methiocarb	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Methomyl	Pesticide	-0.050	ND	-0.050	ND	ug/L	NA
Methoxychlor	Pesticide	-0.008	ND	-0.008	ND	ug/L	NA
Oxamyl	Pesticide	-0.20	ND	-0.20	ND	ug/L	NA
Parathion, Ethyl	Pesticide	-0.02	ND	-0.02	ND	ug/L	NA
Parathion, Methyl	Pesticide	-0.075	ND	-0.075	ND	ug/L	NA
Phorate	Pesticide	-0.072	ND	-0.072	ND	ug/L	NA
Phosmet	Pesticide	-0.06	ND	-0.06	ND	ug/L	NA
Simazine	Pesticide	-0.08	ND	-0.08	ND	ug/L	NA
Toxaphene	Pesticide	-0.380	ND	-0.380	ND	ug/L	NA
Trifluralin	Pesticide	-0.036	ND	-0.036	ND	ug/L	NA

Event = Event Sample Result FB = Field Blank Sample Result

Attachment 4
Sediment Toxicity Follow-up Analyses

Sediment Toxicity Follow-up Analysis

Del Puerto Creek at Hwy 33

Toxicity Results Hyalella azteca 58.8 %

Sample Event: 106 9/9/2013

Pesticide	Results	Units
Bifenthrin	5	ng/g dw
Chlorpyrifos	ND	ng/g dw
Cyfluthrin, total	ND	ng/g dw
Cyhalothrin, lambda, total	0.19 DNQ	ng/g dw
Cypermethrin, total	ND	ng/g dw
DDD(p,p')	ND	ng/g dw
DDE(p,p')	ND	ng/g dw
DDT(p,p')	ND	ng/g dw
Esfenvalerate/Fenvalerate, total	0.38	ng/g dw
Fenpropathrin	0.16 DNQ	ng/g dw
Total Organic Carbon	22000	mg/Kg dw

DNQ: Result is below the report limit and is estimated

Sediment Toxicity Follow-up Analysis

Hospital Creek at River Road

Toxicity Results Hyalella azteca 0 %

Sample Event: 106 9/9/2013

Pesticide	Results	Units
Bifenthrin	0.85	ng/g dw
Chlorpyrifos	0.13 DNQ	ng/g dw
Cyfluthrin, total	ND	ng/g dw
Cyhalothrin, lambda, total	4	ng/g dw
Cypermethrin, total	ND	ng/g dw
DDD(p,p')	ND	ng/g dw
DDE(p,p')	23	ng/g dw
DDT(p,p')	ND	ng/g dw
Esfenvalerate/Fenvalerate, total	0.32 DNQ	ng/g dw
Fenpropathrin	ND	ng/g dw
Total Organic Carbon	1500	mg/Kg dw

DNQ: Result is below the report limit and is estimated

Sediment Toxicity Follow-up Analysis

Ingram Creek at River Road

Toxicity Results Hyalella azteca 0 %

Sample Event: 106 9/9/2013

Pesticide	Results	Units
Bifenthrin	4.1	ng/g dw
Chlorpyrifos	0.59	ng/g dw
Cyfluthrin, total	ND	ng/g dw
Cyhalothrin, lambda, total	8.3	ng/g dw
Cypermethrin, total	1.1	ng/g dw
DDD(p,p')	ND	ng/g dw
DDE(p,p')	22	ng/g dw
DDT(p,p')	ND	ng/g dw
Esfenvalerate/Fenvalerate, total	1.3	ng/g dw
Fenpropathrin	ND	ng/g dw
Total Organic Carbon	7900	mg/Kg dw

DNQ: Result is below the report limit and is estimated

Sediment Toxicity Follow-up Analysis

Westley Wasteway near Cox Road

Toxicity Results Hyalella azteca 2.5 %

Sample Event: 106 9/9/2013

Pesticide	Results	Units
Bifenthrin	23	ng/g dw
Chlorpyrifos	0.2 DNQ	ng/g dw
Cyfluthrin, total	1.2	ng/g dw
Cyhalothrin, lambda, total	0.86	ng/g dw
Cypermethrin, total	ND	ng/g dw
DDD(p,p')	ND	ng/g dw
DDE(p,p')	ND	ng/g dw
DDT(p,p')	ND	ng/g dw
Esfenvalerate/Fenvalerate, total	1.7	ng/g dw
Fenpropathrin	ND	ng/g dw
Total Organic Carbon	17000	mg/Kg dw

DNQ: Result is below the report limit and is estimated

Attachment 5
Exceedance of Recommended Water Quality Values

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	1	19
Field Data	DO	9	103
Field Data	EC	92	106
Field Data	pH	17	106
General Chemistry	Ammonia as N	1	79
General Chemistry	Arsenic	1	19
General Chemistry	Boron	15	34
General Chemistry	E. Coli	13	94
General Chemistry	Selenium	1	19
General Chemistry	Total Dissolved Solids	77	94
Pesticide	Chlorpyrifos	1	50
Pesticide	Dimethoate	1	50
Pesticide	Diuron	2	34
Sediment Toxicity	Hyalella azteca	5	10

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Blewett Drain at Highway 132

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	1	4
Field Data	EC	4	4
General Chemistry	Total Dissolved Solids	3	3

Del Puerto Creek at Hwy 33

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	1	1
Sediment Toxicity	Hyalella azteca	1	1

Del Puerto Creek near Cox Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	7	7
Field Data	pH	2	7
General Chemistry	Boron	1	1
General Chemistry	E. Coli	1	6
General Chemistry	Total Dissolved Solids	6	6

Delta Mendota Canal at DPWD

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	3	6
General Chemistry	Total Dissolved Solids	3	6
Pesticide	Chlorpyrifos	1	6
Pesticide	Diuron	1	1

Hospital Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	1	1
Sediment Toxicity	Hyalella azteca	1	1

Ingram Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	3	3
General Chemistry	Total Dissolved Solids	1	2
Sediment Toxicity	Hyalella azteca	1	1

Los Banos Creek at China Camp Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	2	7
Field Data	EC	6	7

Field Data	pH	2	7
General Chemistry	Ammonia as N	1	6
General Chemistry	Arsenic	1	1
General Chemistry	Boron	1	1
General Chemistry	E. Coli	1	6
General Chemistry	Total Dissolved Solids	4	6
Sediment Toxicity	Hyalella azteca	1	1

Los Banos Creek at Hwy 140

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
General Chemistry	Boron	4	6
General Chemistry	E. Coli	4	6
General Chemistry	Total Dissolved Solids	6	6

Marshall Road Drain near River Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	5	5
Field Data	pH	2	5
General Chemistry	E. Coli	1	5
General Chemistry	Total Dissolved Solids	5	5

Mud Slough Upstream of San Luis Drain

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
General Chemistry	Boron	1	1
General Chemistry	Total Dissolved Solids	6	6

Newman Wasteway near Hills Ferry Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	2	6
Field Data	EC	6	6
General Chemistry	Boron	1	1
General Chemistry	E. Coli	2	5
General Chemistry	Total Dissolved Solids	5	5

Orestimba Creek at Hwy 33

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	2	2
General Chemistry	Selenium	1	1
General Chemistry	Total Dissolved Solids	1	1

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Orestimba Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	1	1
General Chemistry	Total Dissolved Solids	1	1

Poso Slough at Indiana Ave

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	7	7
Field Data	pH	1	7
General Chemistry	Total Dissolved Solids	6	6

Ramona Lake near Fig Avenue

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
Field Data	pH	3	6
General Chemistry	Total Dissolved Solids	5	5

Salt Slough at Lander Ave

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
General Chemistry	Boron	1	1
General Chemistry	Total Dissolved Solids	6	6

Salt Slough at Sand Dam

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	1	1
Field Data	EC	2	2
General Chemistry	Total Dissolved Solids	1	1
Pesticide	Dimethoate	1	1
Pesticide	Diuron	1	1

San Joaquin River at Lander Ave

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	5	6
Field Data	pH	3	6
General Chemistry	Total Dissolved Solids	6	6

San Joaquin River at PID Pumps

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
General Chemistry	Boron	6	6

General Chemistry	E. Coli	1	6
General Chemistry	Total Dissolved Solids	6	6

San Joaquin River at Sack Dam

Type	Constituent	# of Exceedances	# of Tests
Field Data	pH	2	6

Turner Slough at Edminster Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	4	6
Field Data	EC	3	6
General Chemistry	E. Coli	1	6
General Chemistry	Total Dissolved Solids	2	6

Westley Wasteway near Cox Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	6	6
Field Data	pH	2	6
General Chemistry	E. Coli	2	5
General Chemistry	Total Dissolved Solids	4	5
Sediment Toxicity	Hyalella azteca	1	1

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Blewett Drain at Highway 132

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
DO	106	9/9/2013	4.56	mg/l			5
EC	106	9/9/2013	912	µmhos/cm		700	
EC	106	9/10/2013	890	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	540	mg/L		450	
EC	107	10/8/2013	850	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	550	mg/L		450	
Flow	108	11/12/2013	0	cfs			0.01
Flow	109	12/10/2013	0	cfs			0.01
EC	110	1/14/2014	780	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	750	mg/L		450	

Del Puerto Creek at Hwy 33

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	1771	µmhos/cm		700	
Hyalella azteca	106	9/9/2013	58.8	%	yes		

Del Puerto Creek near Cox Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	1838	µmhos/cm		700	
E. Coli	106	9/10/2013	410.6	MPN/100 mL		235	
EC	106	9/10/2013	1600	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	1000	mg/L		450	
EC	107	10/8/2013	1400	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	680	mg/L		450	
EC	108	11/12/2013	957	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	730	mg/L		450	
EC	109	12/10/2013	847	µmhos/cm		700	
pH	109	12/10/2013	8.75			8.5	6.5
Total Dissolved Solids	109	12/10/2013	870	mg/L		450	
EC	110	1/14/2014	1088	µmhos/cm		700	
pH	110	1/14/2014	8.82			8.5	6.5
Total Dissolved Solids	110	1/14/2014	1000	mg/L		450	
Boron	R14	2/10/2014	1100	ug/L		700	
EC	R14	2/10/2014	1242	µmhos/cm		700	
Flow	R14	2/10/2014	0	cfs			0.01
Total Dissolved Solids	R14	2/10/2014	1100	mg/L		450	

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DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Delta Mendota Canal at DPWD

Analyte/Species	Event	Sample Date	Result		Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/10/2013	780		µmhos/cm		700	
EC	107	10/8/2013	795		µmhos/cm		700	
Chlorpyrifos	108	11/12/2013	0.21	=	ug/L		0.015	
Total Dissolved Solids	109	12/10/2013	510		mg/L		450	
Total Dissolved Solids	110	1/14/2014	520		mg/L		450	
Diuron	R14	2/10/2014	2.2	=	ug/L		2	
EC	R14	2/10/2014	838		µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	700		mg/L		450	

Hospital Creek at River Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
Hyalella azteca	106	9/9/2013	0	%	yes		
EC	106	9/10/2013	1694	µmhos/cm		700	

Ingram Creek at River Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	1670	µmhos/cm		700	
Hyalella azteca	106	9/9/2013	0	%	yes		
EC	106	9/10/2013	1400	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	1000	mg/L		450	
EC	107	10/8/2013	1570	µmhos/cm		700	
Flow	109	12/10/2013	0	cfs			0.01

WQV = Water Quality Value as established by the Central Valley Regional Water Quality Control Board

DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Los Banos Creek at China Camp Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
DO	106	9/9/2013	1.77	mg/l			5
EC	106	9/9/2013	1702	µmhos/cm		700	
Flow	106	9/9/2013	0	cfs			0.01
Hyalella azteca	106	9/9/2013	80	%	yes		
Ammonia as N	106	9/10/2013	11	mg/L		1.5	
EC	106	9/10/2013	1298	µmhos/cm		700	
Flow	106	9/10/2013	0	cfs			0.01
pH	106	9/10/2013	8.63			8.5	6.5
Total Dissolved Solids	106	9/10/2013	750	mg/L		450	
EC	107	10/8/2013	833	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	470	mg/L		450	
DO	108	11/12/2013	4.3	mg/l			5
EC	108	11/12/2013	796	µmhos/cm		700	
pH	109	12/10/2013	5.04			8.5	6.5
EC	110	1/14/2014	1460	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	1100	mg/L		450	
Arsenic	R14	2/10/2014	15	ug/L		10	
Boron	R14	2/10/2014	2700	ug/L		700	
E. Coli	R14	2/10/2014	517.2	MPN/100 mL		235	
EC	R14	2/10/2014	2576	µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	1900	mg/L		450	

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DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Los Banos Creek at Hwy 140

Analyte/Species	Event	Sample Date	Result		Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/10/2013	977		µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	560		mg/L		450	
EC	107	10/8/2013	912		µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	510		mg/L		450	
Boron	108	11/12/2013	730		ug/L		700	
E. Coli	108	11/12/2013	307.6		MPN/100 mL		235	
EC	108	11/12/2013	1262		µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	730		mg/L		450	
Boron	109	12/10/2013	970		ug/L		700	
E. Coli	109	12/10/2013	2400	>	MPN/100 mL		235	
EC	109	12/10/2013	1353		µmhos/cm		700	
Total Dissolved Solids	109	12/10/2013	790		mg/L		450	
Boron	110	1/14/2014	3200		ug/L		700	
E. Coli	110	1/14/2014	307.6		MPN/100 mL		235	
EC	110	1/14/2014	4017		µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	2800		mg/L		450	
Boron	R14	2/10/2014	1500		ug/L		700	
E. Coli	R14	2/10/2014	1299.7		MPN/100 mL		235	
EC	R14	2/10/2014	2136		µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	1500		mg/L		450	

Marshall Road Drain near River Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
E. Coli	106	9/10/2013	866.4	MPN/100 mL		235	
EC	106	9/10/2013	980	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	1000	mg/L		450	
EC	107	10/8/2013	900	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	650	mg/L		450	
EC	108	11/12/2013	1074	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	800	mg/L		450	
EC	109	12/10/2013	909	µmhos/cm		700	
pH	109	12/10/2013	8.63			8.5	6.5
Total Dissolved Solids	109	12/10/2013	870	mg/L		450	
EC	110	1/14/2014	1158	µmhos/cm		700	
pH	110	1/14/2014	8.64			8.5	6.5
Total Dissolved Solids	110	1/14/2014	1000	mg/L		450	

WQV = Water Quality Value as established by the Central Valley Regional Water Quality Control Board

DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Mud Slough Upstream of San Luis Drain

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/10/2013	835	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	470	mg/L		450	
EC	107	10/8/2013	1157	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	680	mg/L		450	
EC	108	11/12/2013	1625	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	950	mg/L		450	
EC	109	12/10/2013	1803	µmhos/cm		700	
Total Dissolved Solids	109	12/10/2013	1100	mg/L		450	
EC	110	1/14/2014	2481	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	1500	mg/L		450	
Boron	R14	2/10/2014	2000	ug/L		700	
EC	R14	2/10/2014	2869	µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	2000	mg/L		450	

Newman Wasteway near Hills Ferry Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
E. Coli	107	10/8/2013	290.9	MPN/100 mL		235	
EC	107	10/8/2013	1454	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	820	mg/L		450	
EC	108	11/12/2013	2009	µmhos/cm		700	
EC	108	11/12/2013	2009	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	1200	mg/L		450	
EC	109	12/10/2013	1939	µmhos/cm		700	
Total Dissolved Solids	109	12/10/2013	1300	mg/L		450	
DO	110	1/14/2014	3.05	mg/l			5
E. Coli	110	1/14/2014	235.9	MPN/100 mL		235	
EC	110	1/14/2014	1924	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	1200	mg/L		450	
Boron	R14	2/10/2014	890	ug/L		700	
DO	R14	2/10/2014	1.42	mg/l			5
EC	R14	2/10/2014	1675	µmhos/cm		700	
Flow	R14	2/10/2014	0	cfs			0.01
Total Dissolved Solids	R14	2/10/2014	1200	mg/L		450	

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Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Orestimba Creek at Hwy 33

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	1700	µmhos/cm		700	
EC	R14	2/10/2014	1019	µmhos/cm		700	
Flow	R14	2/10/2014	0	cfs			0.01
Selenium	R14	2/10/2014	6.9	ug/L		5	
Total Dissolved Solids	R14	2/10/2014	900	mg/L		450	

Orestimba Creek at River Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	107	10/8/2013	1400	µmhos/cm		700	
Flow	107	10/8/2013	0	cfs			0.01
Total Dissolved Solids	107	10/8/2013	710	mg/L		450	
Flow	108	11/12/2013	0	cfs			0.01
Flow	109	12/10/2013	0	cfs			0.01

Poso Slough at Indiana Ave

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	1269	µmhos/cm		700	
EC	106	9/10/2013	1141	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	710	mg/L		450	
EC	107	10/8/2013	1532	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	940	mg/L		450	
EC	108	11/12/2013	1263	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	750	mg/L		450	
EC	109	12/10/2013	1774	µmhos/cm		700	
Flow	109	12/10/2013	0	cfs			0.01
Total Dissolved Solids	109	12/10/2013	1200	mg/L		450	
EC	110	1/14/2014	1538	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	900	mg/L		450	
EC	R14	2/10/2014	1028	µmhos/cm		700	
Flow	R14	2/10/2014	0	cfs			0.01
pH	R14	2/10/2014	9.17			8.5	6.5
Total Dissolved Solids	R14	2/10/2014	660	mg/L		450	

WQV = Water Quality Value as established by the Central Valley Regional Water Quality Control Board

DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Ramona Lake near Fig Avenue

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	2221	µmhos/cm		700	
EC	106	9/10/2013	2150	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	1300	mg/L		450	
EC	107	10/8/2013	1900	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	1100	mg/L		450	
EC	108	11/12/2013	1281	µmhos/cm		700	
Flow	108	11/12/2013	0	cfs			0.01
pH	108	11/12/2013	9.82			8.5	6.5
Total Dissolved Solids	108	11/12/2013	1000	mg/L		450	
EC	109	12/10/2013	1039	µmhos/cm		700	
Flow	109	12/10/2013	0	cfs			0.01
pH	109	12/10/2013	9.58			8.5	6.5
Total Dissolved Solids	109	12/10/2013	1100	mg/L		450	
EC	110	1/14/2014	1248	µmhos/cm		700	
pH	110	1/14/2014	8.71			8.5	6.5
Total Dissolved Solids	110	1/14/2014	1100	mg/L		450	

Salt Slough at Lander Ave

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/10/2013	1076	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	610	mg/L		450	
EC	107	10/8/2013	1376	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	780	mg/L		450	
EC	108	11/12/2013	1316	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	760	mg/L		450	
EC	109	12/10/2013	1444	µmhos/cm		700	
Total Dissolved Solids	109	12/10/2013	930	mg/L		450	
EC	110	1/14/2014	1713	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	1000	mg/L		450	
Boron	R14	2/10/2014	980	ug/L		700	
EC	R14	2/10/2014	1868	µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	1200	mg/L		450	

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DNQ = Detected, Not Quantifiable

Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Salt Slough at Sand Dam

Analyte/Species	Event	Sample Date	Result		Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	955		µmhos/cm		700	
Dimethoate	R14	2/10/2014	1.3	=	ug/L		1	
Diuron	R14	2/10/2014	5.6	=	ug/L		2	
EC	R14	2/10/2014	1172		µmhos/cm		700	
Selenastrum capricornutum	R14	2/10/2014	1080000		cells/ml	yes		
Total Dissolved Solids	R14	2/10/2014	720		mg/L		450	

San Joaquin River at Lander Ave

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/10/2013	1672	µmhos/cm		700	
Flow	106	9/10/2013	0	cfs			0.01
pH	106	9/10/2013	8.62			8.5	6.5
Total Dissolved Solids	106	9/10/2013	940	mg/L		450	
EC	107	10/8/2013	891	µmhos/cm		700	
pH	107	10/8/2013	8.61			8.5	6.5
Total Dissolved Solids	107	10/8/2013	510	mg/L		450	
EC	108	11/12/2013	841	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	640	mg/L		450	
pH	109	12/10/2013	8.75			8.5	6.5
Total Dissolved Solids	109	12/10/2013	720	mg/L		450	
EC	110	1/14/2014	1450	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	830	mg/L		450	
EC	R14	2/10/2014	1539	µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	970	mg/L		450	

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Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

San Joaquin River at PID Pumps

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
Boron	106	9/10/2013	730	ug/L		700	
EC	106	9/10/2013	1800	µmhos/cm		700	
Total Dissolved Solids	106	9/10/2013	810	mg/L		450	
Boron	107	10/8/2013	900	ug/L		700	
E. Coli	107	10/8/2013	328.2	MPN/100 mL		235	
EC	107	10/8/2013	1750	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	960	mg/L		450	
Boron	108	11/12/2013	800	ug/L		700	
EC	108	11/12/2013	1086	µmhos/cm		700	
Total Dissolved Solids	108	11/12/2013	820	mg/L		450	
Boron	109	12/10/2013	920	ug/L		700	
EC	109	12/10/2013	975	µmhos/cm		700	
Total Dissolved Solids	109	12/10/2013	920	mg/L		450	
Boron	110	1/14/2014	920	ug/L		700	
EC	110	1/14/2014	1127	µmhos/cm		700	
Total Dissolved Solids	110	1/14/2014	1000	mg/L		450	
Boron	R14	2/10/2014	1500	ug/L		700	
EC	R14	2/10/2014	1350	µmhos/cm		700	
Total Dissolved Solids	R14	2/10/2014	1100	mg/L		450	

San Joaquin River at Sack Dam

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
pH	109	12/10/2013	8.51			8.5	6.5
pH	110	1/14/2014	9.16			8.5	6.5
Flow	R14	2/10/2014	0	cfs			0.01

Turner Slough at Edminster Road

Analyte/Species	Event	Sample Date	Result	Units	Significant Toxicity	WQV Max	WQV Min
DO	106	9/10/2013	3.62	mg/l			5
EC	106	9/10/2013	1801	µmhos/cm		700	
Flow	106	9/10/2013	0	cfs			0.01
Total Dissolved Solids	106	9/10/2013	1100	mg/L		450	
DO	107	10/8/2013	0.58	mg/l			5
E. Coli	107	10/8/2013	235.9	MPN/100 mL		235	
EC	107	10/8/2013	2091	µmhos/cm		700	
Total Dissolved Solids	107	10/8/2013	1300	mg/L		450	
EC	108	11/12/2013	713	µmhos/cm		700	
DO	109	12/10/2013	2.7	mg/l			5
DO	R14	2/10/2014	0.78	mg/l			5

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Westside San Joaquin River Watershed Coalition

Water Quality Value Exceedances for the period of 9/1/2013 to 2/28/2014

Westley Wasteway near Cox Road

Analyte/Species	Event	Sample Date	Result		Units	Significant Toxicity	WQV Max	WQV Min
EC	106	9/9/2013	781		µmhos/cm		700	
Flow	106	9/9/2013	0		cfs			0.01
Hyalella azteca	106	9/9/2013	2.5		%	yes		
EC	106	9/10/2013	781		µmhos/cm		700	
Flow	106	9/10/2013	0		cfs			0.01
EC	107	10/8/2013	775		µmhos/cm		700	
Flow	107	10/8/2013	0		cfs			0.01
Total Dissolved Solids	107	10/8/2013	560		mg/L		450	
E. Coli	108	11/12/2013	275.5		MPN/100 mL		235	
EC	108	11/12/2013	1103		µmhos/cm		700	
Flow	108	11/12/2013	0		cfs			0.01
Total Dissolved Solids	108	11/12/2013	870		mg/L		450	
EC	109	12/10/2013	855		µmhos/cm		700	
pH	109	12/10/2013	9.1				8.5	6.5
Total Dissolved Solids	109	12/10/2013	860		mg/L		450	
E. Coli	110	1/14/2014	2419.6	>	MPN/100 mL		235	
EC	110	1/14/2014	706		µmhos/cm		700	
Flow	110	1/14/2014	0		cfs			0.01
pH	110	1/14/2014	9.29				8.5	6.5
Total Dissolved Solids	110	1/14/2014	620		mg/L		450	

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DNQ = Detected, Not Quantifiable

Attachment 6
Management Plan Activities

San Joaquin Valley Drainage Authority

Westside San Joaquin River Watershed Coalition

Focused Watershed Plan Status Report For:
Hospital and Ingram Creek
Westley Wasteway, Del Puerto Creek, and Orestimba Creek
Salt Slough
Blewett Drain and Marshall Drain

June 15, 2014

Prepared by:
Summers Engineering, Inc.
Consulting Engineers
Hanford California

Introduction and Background

In October, 2008, the San Joaquin Valley Drainage Authority (SJVDA) submitted a Focused Watershed Management Plan (Focused Plan I) for Ingram and Hospital Creeks for the Westside San Joaquin River Watershed Coalition (Westside Coalition). A Focused Watershed Plan (Focused Plan II) for Westley Wasteway, Del Puerto Creek, and Orestimba Creek was finalized in February 2011. Both of these plans outline management practice performance goals and schedules. A Focused Plan (Focused Plan III) for the Salt Slough watershed (including discharges into Poso Slough) was adopted in December 2011 and performance goals were finalized in June of 2012. A Focused Watershed Management Plan for the Blewett Drain and Marshall Road Drain was adopted in January 2014.

The long term goals addressed in Section 5 of the Focused Plan I for Ingram and Hospital Creeks are as follows (in order of priority):

- Construct sediment basins to intercept direct tailwater discharges into Hospital and Ingram Creeks.
- Install high-efficiency irrigation systems such as sprinkler or drip irrigation, tailwater recirculation, gated pipes, shorter runs, etc., where warranted by the crops that are grown.
- Implement additional use of PAM to address sedimentation discharge.
- Reduce use of pesticides, or incorporate use of pesticides that are less likely to be transported to the waters of the State, or which breakdown quickly and are less likely to impact water quality.
- Calibrate ground spray rigs utilized on farmed acres to address possible overspray.
- Address potential aerial overspray by identifying the sensitive regions for all aerial applicators, or elimination of this as an acceptable application procedure for Ingram and Hospital Creeks.
- Increase size of vegetated buffer zones along the perimeters of Ingram and Hospital Creeks.

For the Focused Plan II for Westley Wasteway, and Del Puerto and Orestimba Creeks, the long term goals are listed as:

- Implement additional use of PAM to address sediment discharge
- Reduce use of pesticides, or incorporate use of pesticides that are less likely to be transported to the waters of the State, or which breakdown quickly and are less likely to impact water quality.
- Calibrate ground spray rigs utilized on farmed acres to address possible overspray.
- Address potential aerial overspray by identifying the sensitive regions for all aerial applicators, or elimination of this as an acceptable application procedure for these subwatersheds.
- Increase size of vegetated buffer zones along the perimeters of Westley Wasteway, Del Puerto Creek, and Orestimba Creek.
- Install high-efficiency irrigation systems such as sprinkler or drip irrigation, tailwater recirculation, gated pipes, shorter runs, etc., where warranted by the crops that are grown.

The long term goals for the Focused Plan III for the Salt Slough watershed are listed as:

- Reduce use of pesticides, or incorporate use of pesticides that are less likely to be transported to the waters of the State, or which breakdown quickly and are less likely to impact water quality.
- Calibrate spray rigs utilized on farmed acres to address possible overspray.
- Address potential aerial overspray by identifying the sensitive regions for all aerial applicators.
- Construct tailwater ponds to intercept and hold direct tailwater discharges.
- Install high-efficiency irrigation systems such as sprinkler or drip irrigation, tailwater recirculation, gated pipes, shorter runs, etc., where warranted by the crops that are grown.

The long term goals for the Focused Plan IV for the Blewett Drain and Marshall Road Drain are listed as:

- Submit survey form to growers that inquires about management practices relevant to Tier 1 parameters.
- Conduct grower outreach in the form of group meetings, tailgate meetings.
- Install high-efficiency irrigation systems such as sprinkler or drip irrigation, tailwater recirculation, gated pipes, shorter runs, etc., where warranted by the crops that are grown.
- Construct tailwater ponds to intercept and hold direct tailwater discharges.
- Construct regional tail water return systems.

This report summarizes the status of each of these goals for all of the focused plans.

Sediment Basins.
Sediment and tailwater basins collect and detain surface irrigation runoff prior to discharge into regional drains and creeks. Detention time provided by these ponds allows suspended sediment to settle out of the water column, reducing the sediment load discharged as well as a portion of the hydrophobic pesticides (such as pyrethroids). Since 2008, the Westside Coalition has provided funding assistance to growers who want to install new sedimentation ponds or clean out existing ponds. Typically, sediment ponds are cleaned and constructed during the non-irrigation season.

- New Activities - Funding Assistance. There was not wide interest in the Westside Coalitions sediment pond funding assistance program during this report period (one request was submitted) although a number of project were completed in the late summer of 2012 (summarized in the November 2012 SAMR). The Westside Coalition will continue to offer and promote this program to growers.

High-efficiency Irrigation Systems.
High-efficiency irrigation systems have evolved significantly in recent years and now can replace conventional surface irrigation methods on practically every crop (with alfalfa and pasture as the largest exceptions). There are a several benefits to high-efficiency irrigation systems, however, in terms of drainage, the primary benefit is the virtual elimination of tailwater discharge. These advanced systems are designed to deliver water directly to each individual plant at a rate that is both uniform throughout the irrigated field and slow enough for soil to

absorb, resulting in almost no surface runoff. Additionally, these systems allow for the direct application of fertilizer and other chemicals through the drip hoses (a process called fertigation). High-efficiency irrigation systems require a significant financial investment on the part of the grower (generally $1,000 to $2,000 per acre) and can take a number of years to recuperate that cost.

The acreage of high-efficiency irrigation systems continues to increase within the Westside Coalition. The Coalition is in the process of mapping the fields with these systems within the focused plans' subwatersheds.

Management Practice Surveys have provided some detail on the usage of high efficiency irrigation systems. **Table A6-1** shows the acreage (and percent of irrigated acreage) of these irrigation systems by watershed, based on the initial management practice surveys within each watershed and the estimated 2012/13 acreage. The estimated increase was based on a sampling of Irrigation and Water Districts within the subject subwatersheds. Based on information provided by individual districts, the acreage of high efficiency irrigation systems has increased by approximately 11,000 acres Coalition-wide, largely due to aggressive funding assistance programs through individual Districts and other funding programs such as AWEP or EQUIP. These increases in irrigation improvements are reported at the District level and the geographic distribution is generally not available.

Table A6-1: High Efficiency Irrigation Systems by Subwatershed - Baseline.

Subwatershed	Survey Year	Acreage	Percent of Irrigated Acreage	2012/13 Estimated Drip Acreage	2012/13 Estimated Percent Drip
Hospital Creek	2010	3515	68%	3600	70%
Ingram Creek	2010	927	17%	3200	59%
Westley Wasteway	2011	2891	63%	3200	70%
Del Puerto Creek	2011	3934	50%	5700	72%
Orestimba Creek	2011	5821	50%	6900	59%
Salt Slough	2012	64,705	99%	14,412	23%

Preliminary Management Practice Survey analysis of the Blewett Drain and Marshall Road Drain is showing an aggregate of 6,583 acres out of 12,559 acres (52%) under high efficiency irrigation practices.

The estimates presented in **Table A6-1** are based on the geographic location of each district, an assumed distribution of the reported irrigation improvements, and mapping information provided by some districts. Irrigation system improvements are typically installed during the winter months for use in the following irrigation system. Much of the acreage that converted to high efficiency irrigation systems occurred outside of these six subwatersheds. The Westside Coalition is working with Districts to develop more complete GIS maps and other methods to geographically identify irrigation methods and this data will be updated as it becomes available.

PAM Usage.
PAM is a flocculating agent added to irrigation or drain water. When added to drain water with high suspended solids, PAM binds the suspended sediment materials together into larger particles which then settle out of the water column. When added to the irrigation water, PAM prevents the suspension of soil as the water travels down the furrow.

Tailwater with high suspended solids (no PAM usage)

Tailwater with PAM

In addition to the removal of suspended solids, PAM also helps to control the discharge of pyrethroids, which tend to adhere to the sediment particles, and should result in a reduction of sediment toxicity within the subwatersheds.

PAM usage is difficult to track. Typically, PAM is added to irrigation or drain water on an "as needed" basis, which could be every third or fourth irrigation, depending on the soil, field slope, and crop. Additionally, PAM is not a material for which growers are required to report usage (as they must do for most pesticides), so there is no "clearinghouse" through which usage can be tracked. The only available mechanism for tracking PAM usage is through direct contact with the growers. **Table A6-2** shows the acreage that reported PAM usage through management practice surveys, and the associated percent of surface irrigation acreage reported in the baseline Management Practice surveys. To date, the Westside Coalition has not performed any follow-up surveys and no additional data on PAM usage trends is available.

Table A6-2: PAM by Subwatershed.

Subwatershed	Survey Year	Acreage	Percent of Irrigated Acreage
Hospital Creek	2010	488	29%
Ingram Creek	2010	4375	95%
Westley Wasteway	2011	3346	73%
Del Puerto Creek	2011	2955	37%
Orestimba Creek	2011	3408	29%
Salt Slough	2012	710	1.2%
Blewett/Marshall Drains	2014	12,559	30%

The application of PAM is only appropriate on fields that are surface irrigated (such as furrow or gated pipe) and produce tailwater. As a result, as more fields within the coalition are converted to drip irrigation systems, PAM usage will decrease.

Pesticide Use Activities.
Pesticide use activities vary depending on the crop planted, time of year, current and anticipated pest pressures, and available materials. Most growers utilize a pest control advisor (PCA) who is trained to identify insect, weed, and disease threats, and make recommendations on what material(s) should be applied and what cultural practices should be implemented. It should be noted that pesticides are applied in reaction to actual pest pressures and the material selected to target specific pests as well as rotate through a variety of materials to prevent pesticide resistance. Based on available Pesticide Use Report (PUR) data, most insecticide use (including pyrethroids and organophosphorus pesticides) occurred in February, September, and January on a variety of field and tree crops. Herbicide use continued throughout the non-irrigation season. A summary of the 2013/14 non-irrigation season PUR data by watershed is attached.

A single chlorpyrifos exceedance was measured during the November sampling event at the Delta Mendota Canal (see **Table A6-3**). As with past pesticide exceedances, the Westside Coalition is working aggressively to increase awareness and encourage growers to implement management practices to avoid future exceedances. These activities included a number of meetings and workshops (addressed both to growers and PCAs) and a staff person from the Westside Coalition performed 16 field visits (incl. 7 large tomato growers) to regions of the Coalition with known problems. These visits reviewed the status of irrigation activities, general watershed conditions, visually assessed drainage discharges, and provided a visible public presence.

Table A6-3: 2013/14 Non-Irrigation Season Chlorpyrifos Exceedances

Site	FP #	Date	Constituent	Concentration
Delta Mendota Canal @ DPWD	N/A	11/12/13	Chlorpyrifos	0.21 µg/L

The Focused Plan 3 for the Salt Slough subwatersheds requires a review of annual pesticide use data. The Westside Coalition has summarized non-irrigation season pesticide use for the 2010/11, 2011/12, 2012/13 and 2013/14 periods in **Table A6-4**.

A summary of all available PUR data for the report period is included in this attachment. Note that, as with previous summaries, the PUR data summary contains incomplete and duplicate records and should be considered provisional.

Table A6-4: Salt Slough Non-irrigation Season Pesticide Use Summary.

		Non-Irrigation Season				
Subwatershed	**Pesticide Group**	**2013/14 Acres Treated**	**2012/13 Acres Treated**	**2011/12 Acres Treated**	**2010/11 Acres Treated**	**2009/10 Acres Treated**
Poso Slough	Carbamates	3,412	0	72	0	723
	Herbicide	69,015	11,095	28,820	18,519	48,561
	Organochlorine	88	0	72	0	0
	Organophosphorus	22,079	0	1,492	0	3,820
	Pyrethroid	16,946	1,184	1,017	340	469
Salt Sl. @ Sand Dam	Carbamates	705	87	0	0	431
	Herbicide	33,466	55,079	40,297	45,007	57,326
	Organochlorine	0	0	0	0	0
	Organophosphorus	15,037	150	583	72	369
	Pyrethroid	9,266	2,422	3,287	72	633
Salt Sl. @ Lander Ave	Carbamates	1,334	87	0	0	579
	Herbicide	41,351	44,916	48,214	3,207	70,509
	Organochlorine	0	0	0	0	0
	Organophosphorus	20,384	150	583	511	505
	Pyrethroid	11,323	2,239	4,424	4,352	855

Calibrate Ground Spray Rigs to Address Overspray.
In addition to stressing proper spray applications near waterways in group and individual grower meetings, the Westside Coalition has contracted with CURES to provide a trained sprayer calibration technician and a high-tech instrument for calibrating orchard sprayers for members operating near priority waterways. To date there has been little interest from growers to calibrate the spray rigs and no calibrations have been performed. The Westside Coalition still believes that this service is important for pesticide use management and will continue to encourage growers to utilize the program.

Address Potential Aerial Overspray and Identify Sensitive Regions.
In previous updates, the Westside Coalition reported that aerial photo maps of Ingram, Hospital, Del Puerto, and Orestimba Creeks along with Westley Wasteway had been circulated to growers, PCAs and applicators. New maps for the Blewett Drain and Marshall Road Drain areas are in development.

Vegetated Buffer Zones along Creek Perimeters.
Vegetated buffer zones are intended to provide unfarmed space between the edge of a field and the creek. Conceptually, the buffer zone would reduce the amount of pesticides drifting into the creeks. The Westside Coalition is in the process of identifying buffer zones along the focused

plans' targeted water ways. In the previous update, vegetated buffers for Ingram, Hospital, Del Puerto, and Orestimba Creeks, along with Westley Wasteway were described. Vegetated buffer regions along Salt Slough and Poso Slough are in the process of being identified and a map will be submitted once it is complete.

Management Practice Surveys.

Management practice surveys (surveys) were circulated throughout the Ingram and Hospital Creek subwatersheds (Focused Plan I Surveys) in 2009, and in the Focused Plan II subwatersheds during the summer of 2010. The Focused Plan III subwatershed management practice survey was completed and submitted to the Regional Board in June 2012 and a summary of this data is presented in **Table A6-5**. Summaries for the Focused Plan I and II survey results were presented in previous updates and new information regarding acreage irrigated with high efficiency systems is presented in the **High-efficiency Irrigation Systems** section above.

Table A6-5: Summary of Focused Plan 3 Management Practice Surveys.

	Salt Slough at Lander Avenue*		Salt Slough at Sand Dam*		Poso Slough at Indiana Avenue	
	Acres	%	Acres	%	Acres	%
Survey Area (APN Acreage)	10,250		43,313		11,142	
Area Returned	10,248	100%	35,972	100%	11,475	100%
Surveys Sent	99		622		153	
Surveys Returned	99	100%	622	100%	153	100%
Irrigated Acreage	10,122	87%	42,446	98%	11,410	99%
Furrow/Flood (% Irrigated Acreage)	8,315	94%	33,384	79%	7,876	69%
Drip/Micro/Sprinkler (% Irrigated Ac.)	1,807	20%	9,062	21%	3,543	31%
Fallow/Non-irrigated (% Irrigated Ac.)	296	3.3%	695	2%	65	0.6%
Tree Crops (% Irrigated Ac.)	476	5.4%	531	1%	196	2%
Field Crops (% Irrigated Ac.)	9,647	109%	42.034	99%	11,209	98%
Open/Other (% Irrigated Ac.)	296	3.3%	673	2%	70	0.6%
Sedimentation Ponds (% Irrigated Ac.)	86	1%	284	1%	-	0%
Tile System (% Irrigated Ac.)	216	2%	3,214	8%	-	0%
PAM usage (% Irrigated Ac.)	0	0%	671	2%	39	0.3%
Tailwater leaves field (% Irrigated Ac.)	9,603	95%	39,827	94%	9,274	81%
Stormwater leaves field (% Irrigated Ac.)	8,768	87%	38,727	91%	9,995	88%
Berm Spray Usage (% Irrigated Ac.)	1,301	13%	1,365	3%	670	6%
Manure Usage (% Irrigated Ac.)	4,026	40%	18,321	43%	3,563	31%

* Geographically, the Salt Slough at Lander Avenue subwatershed is inclusive of the Salt Slough at Sand Dam subwatershed, which is inclusive of the Poso Slough Subwatershed. For the sake of data clarity, the data presented in this table represents practices exclusive to each subwatershed without any data overlap. The Salt Slough at Sand Dam data does not include lands in the Poso Slough Subwatershed and the Salt Slough at Lander Avenue data does not include data for lands within the Salt Slough at Sand Dam subwatershed.

Outreach and Grower Education.

The Westside Coalition organizes outreach meetings throughout the year to inform growers and PCA about the materials that have been detected at the monitoring sites and to suggest possible practices that may prevent future detections. Additionally, the exceedance reports that are submitted to the Central Valley Regional Water Quality Control Board are also sent to the Westside Coalition member districts. A list of the meetings is included in **Table A6-6.**

Table A6-6: Outreach Meetings

Date	Group	Location	Description	Attendance	By
10/9/2013	Salt/boron Stakeholder	Los Banos	Real Time Model presentation	10	USBR, Joel Herr presentation
10/29/2013	Ingram/Hospital Stakeholder Meeting	Westley	Continuing stakeholder group meeting	20	Chester Anderson
11/7/2013	Spray Safe	Modesto	Presentation to PCA's	250	Chris Linneman Presentation
1/7/2014	SJVDA Meeting	Los Banos	Coalition Board Meeting: new program requirements	15	SJVDA Board of Directors
1/14/2014	Stevinson WD - Bob Kelly	Newman	Reviewed new requirements	1	Joe McGahan
1/14/2014	Paramount Farms	Firebaugh	Reviewed new requirements	2	Joe McGahan
1/22/2014	Ingram/Hospital Stakeholder Group	Westley	Review new order, management plan status, EQIP grant funding	20	Chester Anderson, Joe M., Rich Peltzer, Diana Waller NRCS
2/4/2014	SJVDA Meeting	Los Banos	Coalition Board Meeting: new program requirements	15	SJVDA Board of Directors
2/10/2014	Salt/boron Stakeholder	Conference call	Real Time Framework Document	10	Joe McGahan, USBR, stakeholders
2/11/2014	Sustainable Cotton Project	Firebaugh	Stakeholder outreach meeting	20	Chris Linneman Presentation
2/12/2014	Westside RCD Meeting	Patterson	Report to board	10	Chester Anderson and Rich Peltzer
2/25/2014	Growers in Westside Coalition	Dixon	Field visit of vegetated ditches	10	Chester Anderson
Various	One-on-one Grower Visits	Northerly Area	Various Coalition Relevant Topics	Varies by Incident	Rich Peltzer

The Coalition began conducting individual meetings with growers in March of 2010. These meetings target parcels adjacent to the creeks and major drains in the Focused Plan watersheds and resulting from observations during the Coalition's Field Visits. The intent of these meetings was to increase awareness of the water quality concerns related to agricultural practices. The individual contacts also help to gain parcel-specific information in regards to agricultural discharges and management practices currently implemented on the properties adjacent to the priority watersheds. In the individual grower visits the Coalition offer resources (i.e. management practice handbooks, information to obtain NRCS-EQIP funds) to aid them in implementing additional management practices if it is determined that additional practices are needed. This determination is made after the discussion and a review of the property by a Coalition representative.

Ingram/Hospital Creek Stakeholder Group.

In May of 2012, the West Stanislaus Resource Conservation District (West Stanislaus RCD) began facilitating a locally led stakeholder process in the Ingram and Hospital Creek watersheds to address the chronic water quality issues within those creeks. The Stakeholder Group is made up of growers within the Ingram/Hospital watersheds and meets monthly to review a variety of issues. The intent of these stakeholder meetings was to:

- make decisions regarding the development and implementation of conservation practices,
- identify opportunities to develop conservation practices that benefit the growers,
- weigh in on the development and implementation of agricultural regulations,
- keep informed about new conservation practices and opportunities,
- influence research and development of new conservation practices for particular crops, soil types and other local conservation needs,
- develop further funding and technical resources that help growers comply with regulations and implement conservation practices.

The Stakeholder group held its first meeting in November 2012, which focused on the stakeholder process, current regulatory environment and role of the Westside Coalition. Subsequent meetings have focused on recent water quality and sediment toxicity issues, outreach to other growers and outreach to regulating agencies.

The Stakeholder group maintains a website through the West Stanislaus RCD where the meeting schedules, agendas, notes and minutes are published.

https://sites.google.com/site/weststanrcd/stakeholder-project

Overview of Decision Tree for Adopting Management Practices

Management practices are adopted at the discretion of the landowner or operator. The Westside Coalition provides resources regarding applicable management practices given the specific water quality issue for a given subwatershed.

1. Management practice surveys mailed to landowners
2. Individual meeting held to discuss current/potential practices
3. Options reviewed with landowner
4. Landowner makes decision on implementing practice

Overview of Outreach Procedure resulting from Pesticide Exceedances.

Pesticide results are typically available to the Westside Coalition approximately 6 weeks after the sample collection. After receipt of this data, it is imported into the Coalition's database and reviewed for exceedances. When a pesticide detection is determined to have exceeded the recommended water quality value, the Westside Coalition begins a review procedure.

1. Determine the material, time of year, and subwatershed in which the material was applied.
2. Identify the crops that are registered for the subject material.
3. Review the subwatershed for the identified crops.

These steps can usually be performed within a week of the exceedance determination and will generally reduce the pool of growers who are likely to have contributed to the exceedance. With that information, the Coalition can target outreach efforts directly to those growers.

Grant Program Outreach.
Information on grant funding availability is continually communicated to landowners and operators through newsletters and direct mailings, grower group meetings and individual contacts with landowners. As noted earlier, grant funding assistance is available through a variety of sources including NRCS (EQIP and AWEP programs), internal district grant and loan programs, Agricultural Drainage Loan Program (ADLP – through State Water Resources Control Board) and California's Proposition 84. Specific information regarding the details of each project are not universally available (and is considered private in some cases) however and overview of funded amounts and acres improved is provided in **Table A6-7**, below.

Because of the high cost associated with irrigation system improvements, many growers take advantage of funding assistance provided by programs through NRCS and individual districts. Table A6-7 shows some of the funding assistance provided during the 2013/14 non-irrigation season.

Table A6-7: 2013/14 Non-Irrigation Season Funding Assistance

District (source)	Funding Amount	Acres Funded
Del Puerto W.D. (ADLP Loans)	$118,044	120
CCID (Internal grant program)	$282,000	736
San Luis Canal Co. (Internal Grant Program)	$962,475	2454
Prop 84 Funding (Coalition-wide)*	$4,116,316	4,560

* Includes completed and in-progress projects.

Other Activities.
In addition to grower-level management practices, Westside Coalition districts are in the process of planning a number of regional projects that will help with drainage management and grower management practice implementation.

- Poso Canal and East Ditch Reservoirs project. CCID is in the process of designing two reservoirs that will capture excess flows and recirculate drain water while improving delivery flexibility. The reservoirs are expected to recover 4,000 acre feet per year of drain water and the improved delivery operation will help encourage growers to convert to high efficiency irrigation systems that will reduce tailwater volumes. Both reservoirs are expected to come on-line by the 2015 irrigation season.
- Moran and Oil Station delivery system improvements. CCID is reviewing project alternatives to improve the delivery systems in two areas of the District. The existing systems are antiquated and are generally not compatible with high efficiency irrigation systems. Improvements would encourage growers to upgrade their irrigation systems and reduce tailwater discharges.
- Marshall Road and Spanish Land Grant Drain Return System. Patterson Irrigation District is reviewing alternatives to capture and recirculate drainage flows into the

Marshall Road Drain and Spanish Land Grant Drain. Partial funding for this project has been awarded through a U.S. Bureau of Reclamation Grant and project design is expected to begin during the winter of 2014.

Subwatershed Review.
In March of 2013, the Westside Coalition performed a review of the collected water quality data from January 2010 through December 2012. The purpose of the review was to identify monitoring sites with water quality results that exceeded the water quality target values provided by the Regional Board. Based on that review, the Blewett Drain and Marshall Road Drain subwatersheds were selected for Focused Management Plans and in June 2013 the Coalition notified the Regional Board of its intention to draft the required plans. On January 2014 a Focused Watershed Management Plan (FP IV) for the Blewett Drain and Marshall Road Drain was adopted.

One of the stated goals of the plan for eliminating toxicity and pesticide detections is accomplished by increasing grower participation and implementing additional management practices. To that end, the Coalition has mailed management practices surveys to all growers in the affected region to catalog current management practices being implemented. The provisional results are tabulated below in Table A6-8.

Table A6-8: FP IV Provisional Survey Results

	Blewett		Marshall Road Drain		Spanish Land Grand Drain	
	Acres	%	Acres	%	Acres	%
Survey Area (APN Acreage)	2,592		6,928		4,531	
Area Returned	2,592	100%	6,909	100%	4,398	97%
Surveys Sent	32		199		77	
Surveys Returned	32	100%	197	99%	74	96%
Irrigated Acreage	2,519	97%	5,778	84%	4,262	97%
Furrow/Flood (% Irrigated Ac.)	763	30%	2,470	43%	2,743	64%
Drip/Micro/Sprinkler (% Irrigated Ac.)	1,756	70%	3,308	57%	1,519	36%
Fallow/Non-irrigated (% Irrigated Ac.)	80	3%	877	15%	4	0%
Tree Crops (% Irrigated Ac.)	1,662	66%	2,339	40%	1,161	27%
Field Crops (% Irrigated Ac.)	857	34%	3,900	68%	3,101	73%
Open/Other (% Irrigated Ac.)	80	3%	416	7%	4	0%
Sedimentation Ponds (% Irrigated Ac.)	811	32%	2,309	40%	2,193	51%
Tile System (% Irrigated Ac.)	286	11%	1,318	23%	967	23%
PAM Usage (% Irrigated Ac.)	348	14%	1,515	26%	1,912	45%
Tailwater Discharge (% Irrigated Ac.)	818	32%	1,811	31%	2,805	66%
Stormwater Discharge (% Irrigated Ac.)	1,506	60%	3,686	64%	2,321	54%
Berm Spray Usage (% Irrigated Ac.)	1,550	62%	2,576	45%	1,115	26%
Manure Usage (% Irrigated Ac.)	0	0%	24	0%	118	3%

Exceedance Tally

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 3/1/2011 to 2/28/2014

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	19	453
Aquatic Toxicity	Pimephales promelas	1	258
Aquatic Toxicity	Selenastrum capricornutum	15	312
Field Data	DO	68	711
Field Data	EC	485	704
Field Data	pH	81	728
General Chemistry	Ammonia as N	10	506
General Chemistry	Arsenic	21	306
General Chemistry	Boron	131	409
General Chemistry	E. Coli	156	606
General Chemistry	Selenium	9	203
General Chemistry	Total Dissolved Solids	419	608
Pesticide	Aldrin	1	379
Pesticide	Carbaryl	1	342
Pesticide	Chlorpyrifos	36	573
Pesticide	DDD(p,p')	1	366
Pesticide	DDE(p,p')	83	366
Pesticide	DDT(p,p')	11	366
Pesticide	Diazinon	9	574
Pesticide	Dimethoate	7	574
Pesticide	Diuron	22	455
Pesticide	Malathion	13	574
Pesticide	Methomyl	1	342
Pesticide	Simazine	1	471
Pesticide	Toxaphene	4	379
Sediment Toxicity	Hyalella azteca	28	79

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 3/1/2011 to 2/28/2014

Blewett Drain at Highway 132

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	4	25
Field Data	EC	15	23
Field Data	pH	1	25
General Chemistry	Ammonia as N	2	19
General Chemistry	E. Coli	5	19
General Chemistry	Total Dissolved Solids	13	19
Pesticide	Chlorpyrifos	3	15
Pesticide	DDE(p,p')	1	14
Pesticide	Diuron	2	14
Sediment Toxicity	Hyalella azteca	3	6

Del Puerto Creek at Hwy 33

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	3	6
Field Data	pH	1	6
General Chemistry	Total Dissolved Solids	1	2
Sediment Toxicity	Hyalella azteca	1	4

Del Puerto Creek near Cox Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	3	23
Field Data	EC	28	35
Field Data	pH	5	37
General Chemistry	Boron	3	11
General Chemistry	E. Coli	5	31
General Chemistry	Total Dissolved Solids	27	31
Pesticide	Carbaryl	1	23
Pesticide	Chlorpyrifos	2	24
Pesticide	DDE(p,p')	10	23
Pesticide	DDT(p,p')	1	23

Delta Mendota Canal at DPWD

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	3	34
Field Data	pH	3	35
General Chemistry	Total Dissolved Solids	6	35
Pesticide	Chlorpyrifos	2	37
Pesticide	Diuron	1	1

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 3/1/2011 to 2/28/2014

Hospital Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	1	19
Field Data	EC	8	19
Field Data	pH	2	19
General Chemistry	Arsenic	2	14
General Chemistry	Boron	3	14
General Chemistry	E. Coli	6	6
General Chemistry	Total Dissolved Solids	2	6
Pesticide	Chlorpyrifos	4	15
Pesticide	DDE(p,p')	4	6
Pesticide	Diazinon	2	15
Pesticide	Dimethoate	1	15
Pesticide	Toxaphene	1	6
Sediment Toxicity	Hyalella azteca	5	6

Ingram Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	2	21
Aquatic Toxicity	Selenastrum capricornutum	3	21
Field Data	EC	24	30
Field Data	pH	3	32
General Chemistry	Ammonia as N	1	26
General Chemistry	Arsenic	1	21
General Chemistry	Boron	11	21
General Chemistry	E. Coli	10	26
General Chemistry	Total Dissolved Solids	20	26
Pesticide	Chlorpyrifos	5	22
Pesticide	DDE(p,p')	17	20
Pesticide	DDT(p,p')	3	20
Pesticide	Diazinon	2	22
Pesticide	Dimethoate	1	22
Pesticide	Diuron	4	21
Pesticide	Malathion	1	22
Pesticide	Simazine	1	23
Pesticide	Toxaphene	1	21
Sediment Toxicity	Hyalella azteca	6	6

Little Panoche Creek at W. Boundary

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	1
Aquatic Toxicity	Selenastrum capricornutum	1	1
Field Data	EC	1	1
Field Data	pH	1	1

General Chemistry	Boron	1	1
General Chemistry	E. Coli	1	1
General Chemistry	Total Dissolved Solids	1	1
Pesticide	DDE(p,p')	1	1

Los Banos Creek at China Camp Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	2	26
Field Data	DO	8	42
Field Data	EC	35	42
Field Data	pH	9	44
General Chemistry	Ammonia as N	1	36
General Chemistry	Arsenic	11	26
General Chemistry	Boron	21	26
General Chemistry	E. Coli	13	35
General Chemistry	Selenium	1	20
General Chemistry	Total Dissolved Solids	29	36
Pesticide	Aldrin	1	14
Pesticide	Chlorpyrifos	1	26
Sediment Toxicity	Hyalella azteca	1	5

Los Banos Creek at Hwy 140

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	37
Field Data	DO	2	37
Field Data	EC	34	37
Field Data	pH	1	39
General Chemistry	Arsenic	6	36
General Chemistry	Boron	29	36
General Chemistry	E. Coli	24	36
General Chemistry	Total Dissolved Solids	34	36

Marshall Road Drain near River Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	17
Field Data	EC	19	23
Field Data	pH	3	24
General Chemistry	Ammonia as N	1	24
General Chemistry	E. Coli	7	24
General Chemistry	Total Dissolved Solids	20	24
Pesticide	Chlorpyrifos	3	18
Pesticide	DDE(p,p')	5	17
Pesticide	DDT(p,p')	1	17
Pesticide	Diazinon	1	19
Pesticide	Malathion	2	19

Mud Slough Upstream of San Luis Drain

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	1	38
Field Data	EC	37	38
Field Data	pH	6	40
General Chemistry	Boron	12	14
General Chemistry	E. Coli	5	36
General Chemistry	Total Dissolved Solids	35	36
Pesticide	Malathion	2	36
Pesticide	Methomyl	1	36

Newman Wasteway near Hills Ferry Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	25
Field Data	DO	12	40
Field Data	EC	39	40
Field Data	pH	1	42
General Chemistry	Boron	9	14
General Chemistry	E. Coli	11	35
General Chemistry	Total Dissolved Solids	34	35
Pesticide	DDE(p,p')	1	25
Pesticide	Diazinon	1	26
Pesticide	Dimethoate	2	26
Pesticide	Diuron	1	26
Sediment Toxicity	Hyalella azteca	1	4

Orestimba Creek at Hwy 33

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	2	24
Aquatic Toxicity	Selenastrum capricornutum	2	24
Field Data	DO	9	29
Field Data	EC	14	28
Field Data	pH	2	30
General Chemistry	E. Coli	6	12
General Chemistry	Selenium	8	18
General Chemistry	Total Dissolved Solids	1	12
Pesticide	Chlorpyrifos	1	26
Pesticide	DDD(p,p')	1	23
Pesticide	DDE(p,p')	21	23
Pesticide	DDT(p,p')	4	23
Pesticide	Diazinon	1	26
Pesticide	Toxaphene	1	24
Sediment Toxicity	Hyalella azteca	3	5

Orestimba Creek at River Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	14
Field Data	DO	1	19
Field Data	EC	11	19
Field Data	pH	3	19
General Chemistry	E. Coli	8	15
General Chemistry	Total Dissolved Solids	6	15
Pesticide	Chlorpyrifos	2	14
Pesticide	DDE(p,p')	11	13
Pesticide	DDT(p,p')	1	13

Poso Slough at Indiana Ave

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	4	27
Aquatic Toxicity	Selenastrum capricornutum	2	30
Field Data	DO	1	40
Field Data	EC	31	41
Field Data	pH	6	43
General Chemistry	Ammonia as N	3	36
General Chemistry	Arsenic	1	26
General Chemistry	E. Coli	13	36
General Chemistry	Total Dissolved Solids	26	36
Pesticide	Chlorpyrifos	6	26
Pesticide	DDE(p,p')	1	25
Pesticide	Diazinon	1	26
Pesticide	Dimethoate	1	26
Pesticide	Diuron	5	26
Pesticide	Malathion	2	26
Sediment Toxicity	Hyalella azteca	1	6

Ramona Lake near Fig Avenue

Type	Constituent	# of Exceedances	# of Tests
Field Data	DO	5	37
Field Data	EC	36	36
Field Data	pH	7	37
General Chemistry	Ammonia as N	1	33
General Chemistry	Boron	8	11
General Chemistry	E. Coli	2	33
General Chemistry	Total Dissolved Solids	33	33
Pesticide	Chlorpyrifos	2	24
Pesticide	DDE(p,p')	1	23
Pesticide	Diazinon	1	24
Pesticide	Toxaphene	1	23

Sediment Toxicity	Hyalella azteca	2	6

Salt Slough at Lander Ave

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	1	14
Field Data	EC	36	37
General Chemistry	Boron	4	14
General Chemistry	E. Coli	2	36
General Chemistry	Total Dissolved Solids	36	36
Pesticide	Diuron	2	38
Pesticide	Malathion	3	38

Salt Slough at Sand Dam

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	27
Aquatic Toxicity	Selenastrum capricornutum	2	14
Field Data	DO	1	30
Field Data	EC	25	31
Field Data	pH	2	31
General Chemistry	Total Dissolved Solids	9	14
Pesticide	Chlorpyrifos	3	26
Pesticide	Dimethoate	1	26
Pesticide	Diuron	3	26
Pesticide	Malathion	2	26
Sediment Toxicity	Hyalella azteca	1	6

San Joaquin River at Fremont Ford

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	1	4
Field Data	EC	4	4
General Chemistry	Boron	3	4
General Chemistry	Total Dissolved Solids	4	4
Pesticide	Diuron	1	4

San Joaquin River at Lander Ave

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	34
Field Data	EC	21	33
Field Data	pH	10	33
General Chemistry	E. Coli	7	31
General Chemistry	Total Dissolved Solids	22	31
Pesticide	Diuron	1	31
Pesticide	Malathion	1	31

Westside San Joaquin River Watershed Coalition

Number of Water Quality Value Exceedances for the period of 3/1/2011 to 2/28/2014

San Joaquin River at PID Pumps

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	30	35
Field Data	pH	1	35
General Chemistry	Boron	21	35
General Chemistry	E. Coli	3	35
General Chemistry	Total Dissolved Solids	30	35
Pesticide	Chlorpyrifos	1	37
Pesticide	Dimethoate	1	37

San Joaquin River at Sack Dam

Type	Constituent	# of Exceedances	# of Tests
Field Data	EC	1	37
Field Data	pH	9	37
General Chemistry	Total Dissolved Solids	1	36

Turner Slough at Edminster Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Ceriodaphnia dubia	1	25
Aquatic Toxicity	Pimephales promelas	1	26
Field Data	DO	22	39
Field Data	EC	14	38
Field Data	pH	1	39
General Chemistry	Ammonia as N	1	36
General Chemistry	E. Coli	11	36
General Chemistry	Total Dissolved Solids	13	36
Pesticide	DDE(p,p')	1	13
Pesticide	DDT(p,p')	1	13

Westley Wasteway near Cox Road

Type	Constituent	# of Exceedances	# of Tests
Aquatic Toxicity	Selenastrum capricornutum	1	23
Field Data	DO	1	39
Field Data	EC	16	37
Field Data	pH	4	39
General Chemistry	Boron	6	23
General Chemistry	E. Coli	17	33
General Chemistry	Total Dissolved Solids	16	33
Pesticide	Chlorpyrifos	1	24
Pesticide	DDE(p,p')	9	23
Pesticide	Diuron	2	22
Sediment Toxicity	Hyalella azteca	4	6

Pesticide Use Report Summary

(Includes partial data, duplicate records and incomplete records)

Pesticide Use Summary

9/1/2013 through 3/1/2014

County Fresno

Monitoring Site Poso Slough at Indiana Ave

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	September	584	10	13.8566	Tomatos
2,4-D, DIMETHYLAMINE SALT	November	217	4	489.896	NA
2,4-D, DIMETHYLAMINE SALT	December	61.6	2	52.1954	Wheat
BETA-CYFLUTHRIN	February	4653.4	81	109.505	Alfalfa
BIFENTHRIN	February	894	4	69.3612	Tomatos
BIFENTHRIN	March	108	2	8.3822	Tomatos
BIFENTHRIN	September	322	6	21.5896	Tomatos
BIFENTHRIN	September	382	4	38.2576	Melons
BROMOXYNIL OCTANOATE	November	181.2	2	64.3186	Alfalfa
CARFENTRAZONE-ETHYL	November	66	3	1.4055	Wheat
CHLORPYRIFOS	January	136	4	32.1596	Wheat
CHLORPYRIFOS	January	303.8	6	306.808	Alfalfa
CHLORPYRIFOS	February	2885.58	71	2822.43	Alfalfa
CHLORPYRIFOS	September	1003	25	566.733	Alfalfa
CHLORPYRIFOS	September	528	12	266.649	Cotton
CLETHODIM	September	160	2	42.6014	Alfalfa
CLETHODIM	October	200	2	53.2517	Alfalfa
CLETHODIM	November	181.2	2	18.1056	Alfalfa
CYFLUTHRIN	February	241.2	4	10.7726	Alfalfa
DICAMBA, DIMETHYLAMINE SALT	December	277.2	12	42.0166	Wheat
DIMETHOATE	January	240.8	8	89.6458	Wheat
DIMETHOATE	January	1180.22	22	504.974	Alfalfa
DIMETHOATE	February	6674.8	101	3400.97	Alfalfa
DIMETHOATE	September	322	6	159.093	Tomatos
DIURON	September	11837.4	283	276.354	Cotton
DIURON	October	4726.4	88	84.4221	Cotton
DIURON	November	859.42	16	859.452	Alfalfa
DIURON	December	1398	26	2693.37	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	January	79.8	10	160.027	Pistachios
GLYPHOSATE, ISOPROPYLAMINE SALT	January	751.26	12	752.098	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	468	3	937.119	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	January	172	2	172.206	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	6	2	19.983	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	February	124	2	173.807	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	September	200	2	200.034	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	October	78	3	78.0933	Tomatos

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	October	30	3	3.7563	NA
GLYPHOSATE, ISOPROPYLAMINE SALT	November	534	20	534.638	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	November	223	5	446.533	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	2314.26	37	2828.5	NA
GLYPHOSATE, ISOPROPYLAMINE SALT	December	466	8	466.557	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	December	282	6	564.674	Tomatos
GLYPHOSATE, POTASSIUM SALT	January	140	2	144.869	Pistachios
GLYPHOSATE, POTASSIUM SALT	January	265.1	11	365.538	Almonds
GLYPHOSATE, POTASSIUM SALT	January	320.8	6	442.331	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	80	2	110.334	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	501.8	8	692.254	Cotton
GLYPHOSATE, POTASSIUM SALT	September	156	3	430.304	Almonds
HEXAZINONE	January	104	4	52.932	Alfalfa
HEXAZINONE	November	859.42	16	574.126	Alfalfa
HEXAZINONE	December	170	2	43.2822	Alfalfa
LAMBDA-CYHALOTHRIN	January	969.42	20	28.8588	Alfalfa
LAMBDA-CYHALOTHRIN	February	3738.78	87	146.101	Alfalfa
LAMBDA-CYHALOTHRIN	September	374	10	11.581	Alfalfa
MALATHION	February	2096	20	3217.37	Alfalfa
MALATHION	September	36	3	43.326	Alfalfa
MCPA, DIMETHYLAMINE SALT	November	179.2	6	101.35	Wheat
MCPA, DIMETHYLAMINE SALT	December	277.2	12	127.390	Wheat
METHOMYL	September	548.8	6	246.96	Melons
METHOMYL	September	482	8	433.8	Tomatos
METHOMYL	September	935	27	622.125	Alfalfa
ORYZALIN	November	223	5	927.726	Almonds
OXAMYL	September	382	4	190.16	Melons
OXYFLUORFEN	January	348	3	176.704	Tomatos
OXYFLUORFEN	January	219.8	12	227.455	Pistachios
OXYFLUORFEN	February	776	6	194.597	NA
OXYFLUORFEN	October	30	3	1.8813	NA
OXYFLUORFEN	November	1002	6	524.668	Tomatos
OXYFLUORFEN	November	3103.02	52	1514.38	NA
OXYFLUORFEN	November	223	5	326.807	Almonds
OXYFLUORFEN	December	282	6	143.191	Tomatos
OXYFLUORFEN	December	366	2	183.601	NA
PARAQUAT DICHLORIDE	January	148	2	12.2458	Alfalfa
PARAQUAT DICHLORIDE	September	763	14	528.303	Cotton
PARAQUAT DICHLORIDE	October	5318.6	106	2002.27	Cotton
PARAQUAT DICHLORIDE	November	859.42	16	594.869	Alfalfa
PARAQUAT DICHLORIDE	December	1948.8	42	512.294	Alfalfa
PENDIMETHALIN	January	963.42	20	1824.71	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PENDIMETHALIN	January	148.2	10	443.18	Pistachios
PENDIMETHALIN	February	252	8	477.270	Alfalfa
PENDIMETHALIN	November	424	4	803.026	Asparagus
PENDIMETHALIN	December	806	18	2980.67	Alfalfa
PERMETHRIN	September	457	8	64.8	Melons
PROMETRYN	November	366	12	691.155	Cotton
THIDIAZURON	September	11837.4	283	552.708	Cotton
THIDIAZURON	October	4726.4	88	168.845	Cotton
TRIFLURALIN	January	1730	29	3460	Alfalfa
TRIFLURALIN	February	1445.3	20	2890.6	Alfalfa
TRIFLURALIN	September	306	6	75.9798	Tomatos
TRIFLURALIN	October	795	12	197.364	Tomatos
TRIFLURALIN	October	369	3	91.605	NA

Monitoring Site **San Joaquin River at Sack D**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
BETA-CYFLUTHRIN	February	816	24	19.2108	Alfalfa
CHLORPYRIFOS	February	24	4	2.9088	Alfalfa
CHLORPYRIFOS	September	570	18	414.406	Alfalfa
DIMETHOATE	January	312.4	8	116.707	Wheat
DIMETHOATE	February	2652	36	1568.99	Alfalfa
DIURON	September	996.8	28	25.6922	Cotton
DIURON	December	24	4	24.0236	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	January	936	6	1874.24	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	January	1610.52	30	1612.32	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	October	60	6	7.5126	NA
GLYPHOSATE, ISOPROPYLAMINE SALT	October	1128	12	1129.35	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	November	2702.52	48	2705.63	NA
GLYPHOSATE, ISOPROPYLAMINE SALT	November	306	6	612.731	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	564	12	1129.35	Tomatos
GLYPHOSATE, POTASSIUM SALT	January	315.1	13	434.497	Almonds
GLYPHOSATE, POTASSIUM SALT	February	117.75	7	183.62	Almonds
GLYPHOSATE, POTASSIUM SALT	September	312	6	860.608	Almonds
HEXAZINONE	December	24	4	6.1076	Alfalfa
LAMBDA-CYHALOTHRIN	February	24	4	0.646	Alfalfa
MALATHION	February	1836	12	3602.58	Alfalfa
MALATHION	September	288	18	346.147	Alfalfa
MCPA, DIMETHYLAMINE SALT	November	312.4	8	176.662	Wheat
METHOMYL	September	582	30	328.05	Alfalfa
ORYZALIN	November	306	6	1273.02	Almonds
OXYFLUORFEN	January	696	6	353.408	Tomatos

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	October	60	6	3.7626	NA
OXYFLUORFEN	November	306	6	448.461	Almonds
OXYFLUORFEN	November	1182	6	619.073	Tomatos
OXYFLUORFEN	November	4624.32	72	2292.83	NA
OXYFLUORFEN	December	564	12	286.382	Tomatos
PARAQUAT DICHLORIDE	October	312.4	8	216.282	Cotton
PARAQUAT DICHLORIDE	December	24	4	1.986	Alfalfa
THIDIAZURON	September	996.8	28	51.3838	Cotton
TRIFLURALIN	February	568.5	21	1137	Alfalfa
TRIFLURALIN	September	1584	18	393.377	Tomatos
TRIFLURALIN	October	738	6	183.21	NA
TRIFLURALIN	October	594	12	147.427	Tomatos

County **Madera**

Monitoring Site **Poso Slough at Indiana Ave**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
DIURON	September	255	6	6.2283	Cotton
DIURON	October	311.4	4	9.147	Cotton
GLYPHOSATE, POTASSIUM SALT	February	236	4	488.23	Almonds
GLYPHOSATE, POTASSIUM SALT	September	30	2	62.063	Almonds
GLYPHOSATE, POTASSIUM SALT	October	15	3	62.0631	Fallow
GLYPHOSATE, POTASSIUM SALT	November	175	2	362.007	Almonds
ORYZALIN	November	175	2	545.986	Almonds
OXYFLUORFEN	February	236	4	22.1526	Almonds
OXYFLUORFEN	November	175	2	175.575	Almonds
PARAQUAT DICHLORIDE	October	306	2	317.668	Almonds
SETHOXYDIM	September	30	2	10.5146	Almonds
THIDIAZURON	September	255	6	12.4569	Cotton
THIDIAZURON	October	311.4	4	18.2944	Cotton

Monitoring Site **San Joaquin River at Lander**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
CHLORPYRIFOS	February	206	3	203.173	Alfalfa
CHLORPYRIFOS	September	80	1	37.5787	Alfalfa
DICAMBA, DIMETHYLAMINE SALT	January	103.3	2	14.7782	Wheat
DIMETHOATE	February	77.6	2	38.6633	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	21.35	1	16.0273	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	15.53	1	15.4763	Almonds
GLYPHOSATE, POTASSIUM SALT	February	48	1	66.2006	Alfalfa
HEXAZINONE	December	158	2	50.2449	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

LAMBDA-CYHALOTHRIN	February	125.6	3	3.6741	Alfalfa
MCPA, DIMETHYLAMINE SALT	January	103.3	2	43.7784	Wheat
PARAQUAT DICHLORIDE	December	158	2	82.0057	Alfalfa
PENDIMETHALIN	February	21.35	1	80.8708	Almonds
PENDIMETHALIN	December	158	2	299.241	Alfalfa
SAFLUFENACIL	February	21.35	1	0.7	Almonds

Monitoring Site **San Joaquin River at Sack D**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	January	453.75	10	741.934	Pistachios
2,4-D, DIMETHYLAMINE SALT	February	127.84	5	209.023	Pistachios
BROMACIL	February	40	1	80	Citrus
COPPER SULFATE (BASIC)	November	101.4	3	432.572	Citrus
DIURON	February	80	2	208	Citrus
DIURON	September	468	12	11.4312	Cotton
DIURON	October	908.8	12	26.7006	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	January	32	8	31.9728	Wheat
GLYPHOSATE, ISOPROPYLAMINE SALT	January	261.2	4	391.451	Fallow
GLYPHOSATE, POTASSIUM SALT	January	453.75	10	938.56	Pistachios
GLYPHOSATE, POTASSIUM SALT	January	740.18	22	1289.37	Almonds
GLYPHOSATE, POTASSIUM SALT	February	80	2	110.334	Citrus
GLYPHOSATE, POTASSIUM SALT	February	962.75	14	1991.54	Almonds
GLYPHOSATE, POTASSIUM SALT	February	127.84	5	264.361	Pistachios
GLYPHOSATE, POTASSIUM SALT	September	80	2	165.502	Citrus
GLYPHOSATE, POTASSIUM SALT	September	430	8	889.543	Almonds
GLYPHOSATE, POTASSIUM SALT	September	25	1	51.6917	Pistachios
GLYPHOSATE, POTASSIUM SALT	October	25	1	51.7468	Citrus
GLYPHOSATE, POTASSIUM SALT	October	19.36	2	74.8068	Walnuts
GLYPHOSATE, POTASSIUM SALT	October	318	8	657.759	Almonds
GLYPHOSATE, POTASSIUM SALT	October	30	6	124.126	Fallow
GLYPHOSATE, POTASSIUM SALT	October	611.59	16	1666.10	Pistachios
GLYPHOSATE, POTASSIUM SALT	November	1657.5	19	2497.81	Almonds
GLYPHOSATE, POTASSIUM SALT	November	345	3	713.643	Pistachios
GLYPHOSATE, POTASSIUM SALT	December	93.75	1	193.913	Almonds
MCPA, DIMETHYLAMINE SALT	December	183.2	4	101.525	Wheat
ORYZALIN	February	384.95	4	908.756	Almonds
ORYZALIN	November	757.5	9	2363.41	Almonds
ORYZALIN	November	210	2	655.233	Pistachios
ORYZALIN	December	93.75	1	390.02	Almonds
OXYFLUORFEN	January	740.18	22	563.444	Almonds
OXYFLUORFEN	January	453.75	10	665.068	Pistachios

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	February	127.84	5	187.328	Pistachios
OXYFLUORFEN	February	764	12	71.7552	Almonds
OXYFLUORFEN	October	19.36	2	19.4236	Walnuts
OXYFLUORFEN	October	611.59	16	149.53	Pistachios
OXYFLUORFEN	October	233	4	29.1756	Almonds
OXYFLUORFEN	November	95.19	10	47.7512	Grapes
OXYFLUORFEN	November	1657.5	19	1216.82	Almonds
OXYFLUORFEN	November	345	3	227.605	Pistachios
OXYFLUORFEN	December	93.75	1	11.7585	Almonds
PARAQUAT DICHLORIDE	September	215	2	223.204	Pistachios
PARAQUAT DICHLORIDE	October	737	7	765.101	Almonds
PARAQUAT DICHLORIDE	October	183.2	4	15.1584	Cotton
PARAQUAT DICHLORIDE	November	95.19	10	15.7525	Grapes
PENDIMETHALIN	January	453.75	10	1718.74	Pistachios
PENDIMETHALIN	February	127.84	5	484.24	Pistachios
PENDIMETHALIN	October	581.59	15	1101.36	Pistachios
PENDIMETHALIN	October	19.36	2	73.333	Walnuts
PENDIMETHALIN	November	900	10	1704.54	Almonds
RIMSULFURON	January	740.18	22	23.1308	Almonds
SAFLUFENACIL	September	125	2	5.4652	Almonds
SAFLUFENACIL	October	19.36	2	0.854	Walnuts
SAFLUFENACIL	November	900	10	19.684	Almonds
SETHOXYDIM	September	210	5	73.6019	Almonds
SIMAZINE	February	40	1	144	Citrus
SIMAZINE	October	19.36	2	52.272	Walnuts
THIDIAZURON	September	468	12	22.8618	Cotton
THIDIAZURON	October	908.8	12	53.4016	Cotton

County **Merced**

Monitoring Site **Newman Wasteway near Hill**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
CARFENTRAZONE-ETHYL	February	120	2	0.937	Oats
CHLORPYRIFOS	January	162	3	152.194	Alfalfa
CHLORPYRIFOS	February	72	3	52.9794	Alfalfa
CLETHODIM	February	80	1	21.3007	Alfalfa
DICAMBA, DIMETHYLAMINE SALT	February	120	2	18.137	Oats
DIMETHOATE	February	490	13	242.386	Alfalfa
DIURON	December	28	1	42.9028	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	January	164.25	1	246.165	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	60	4	27.5746	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	September	120	2	240.041	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	15	1	30.0051	Walnuts
HEXAZINONE	December	28	1	14.5563	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	February	80	1	7.9399	Alfalfa
LAMBDA-CYHALOTHRIN	January	162	3	4.8019	Alfalfa
LAMBDA-CYHALOTHRIN	February	383	11	11.5637	Alfalfa
MCPA, DIMETHYLAMINE SALT	February	120	2	44.2954	Oats
METRIBUZIN	December	40	1	15	Tomatos
ORYZALIN	January	164.25	1	256.243	Almonds
ORYZALIN	February	60	4	59.4286	Almonds
OXYFLUORFEN	January	164.25	1	240.781	Almonds
OXYFLUORFEN	November	230	2	28.8444	Almonds
OXYFLUORFEN	December	40	1	15.0493	Tomatos
PARAQUAT DICHLORIDE	January	85	2	57.7028	Alfalfa
PARAQUAT DICHLORIDE	February	294	7	197.726	Alfalfa
PENDIMETHALIN	January	85	2	321.968	Alfalfa
PENDIMETHALIN	February	374	8	354.165	Alfalfa
PENDIMETHALIN	December	78	2	147.727	Alfalfa
SAFLUFENACIL	February	60	4	1.2504	Almonds

Monitoring Site **Poso Slough at Indiana Ave**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
BETA-CYFLUTHRIN	February	34	2	0.7937	Alfalfa
CHLORPYRIFOS	February	42	2	42.4214	Alfalfa
CHLORPYRIFOS	September	18	1	9.0903	Cotton
DIMETHOATE	February	96	3	47.4917	Alfalfa
DIURON	September	2600.75	73	54.8483	Cotton
DIURON	October	320.57	5	9.5644	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	November	60	2	60.0718	Cotton
GLYPHOSATE, POTASSIUM SALT	February	162	1	223.427	Tomatos
LAMBDA-CYHALOTHRIN	February	104	3	3.0053	Alfalfa
OXYFLUORFEN	December	155	1	77.7545	Tomatos
OXYFLUORFEN	December	128.12	3	64.2503	Cotton
PARAQUAT DICHLORIDE	October	416	13	287.934	Cotton
PENDIMETHALIN	February	14	1	26.515	Alfalfa
THIDIAZURON	September	2600.75	73	109.696	Cotton
THIDIAZURON	October	320.57	5	19.1288	Cotton

Monitoring Site **Salt Slough at Lander Ave**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	September	884.6	11	19.7619	Tomatos

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

(S)-CYPERMETHRIN	October	72.2	2	1.7734	Tomatos
2,4-D, DIMETHYLAMINE SALT	February	189	4	164.291	Wheat
BETA-CYFLUTHRIN	February	693.2	9	16.2889	Alfalfa
BIFENTHRIN	September	884.6	11	59.2857	Tomatos
BIFENTHRIN	September	79	3	7.8458	Melons
BIFENTHRIN	October	72.2	2	5.3202	Tomatos
BROMOXYNIL HEPTANOATE	January	140	1	24.0879	Oats
BROMOXYNIL OCTANOATE	January	140	1	24.98	Oats
CARFENTRAZONE-ETHYL	February	40	1	0.2811	Corn
CARFENTRAZONE-ETHYL	February	160.4	2	1.6304	Wheat
CARFENTRAZONE-ETHYL	December	169	2	2.4736	Wheat
CARFENTRAZONE-ETHYL	December	100	2	1.4664	Oats
CHLORPYRIFOS	February	1101.6	19	851.622	Alfalfa
CHLORPYRIFOS	September	372	4	186.274	Alfalfa
CHLORPYRIFOS	November	40.3	1	23.8867	Corn
CLETHODIM	September	40.5	1	7.419	Tomatos
CLETHODIM	October	202	4	53.8054	Alfalfa
CYFLUTHRIN	February	89.2	3	3.9349	Alfalfa
CYFLUTHRIN	September	169	2	5.356	Corn
CYFLUTHRIN	September	529.63	12	13.7945	Cotton
DICAMBA, DIMETHYLAMINE SALT	February	127.5	2	36.4406	Wheat
DIMETHOATE	January	341.06	8	168.722	Alfalfa
DIMETHOATE	February	2144.63	41	988.577	Alfalfa
DIQUAT DIBROMIDE	September	164.63	3	153.482	Alfalfa
DIURON	January	181.26	3	308.425	Alfalfa
DIURON	September	338	4	10.0744	Corn
DIURON	September	7992.62	145	220.727	Cotton
DIURON	October	176.7	5	6.6247	Cotton
DIURON	November	93.6	1	112.315	Wheat
DIURON	November	1149.81	17	1311.56	Alfalfa
DIURON	December	100	1	400	Right of Way
ESFENVALERATE	September	658.17	10	32.1856	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	20	1	19.9829	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	January	169.5	2	215.302	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	1793.8	19	1816.7	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	February	72	2	143.877	Melons
GLYPHOSATE, ISOPROPYLAMINE SALT	September	333.8	10	417.290	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	September	100	1	96.4822	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	October	101.8	11	98.2188	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	October	92.5	2	121.461	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	November	240.9	3	318.574	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	November	145.3	5	217.757	Tomatos

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	December	100	1	149.872	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	December	373	1	373.064	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	December	406.3	4	588.741	Alfalfa
GLYPHOSATE, POTASSIUM SALT	January	152.9	1	184.534	Tomatos
GLYPHOSATE, POTASSIUM SALT	February	92.7	3	111.879	Tomatos
GLYPHOSATE, POTASSIUM SALT	February	274.69	7	413.754	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	133.1	5	11.4763	Cotton
GLYPHOSATE, POTASSIUM SALT	September	16.2	1	893.709	Alfalfa
GLYPHOSATE, POTASSIUM SALT	November	69	1	47.6093	Tomatos
GLYPHOSATE, POTASSIUM SALT	December	273	4	282.346	Tomatos
GLYPHOSATE, POTASSIUM SALT	December	639	11	660.931	Cotton
GLYPHOSATE, POTASSIUM SALT	December	26	2	26.894	Alfalfa
HEXAZINONE	January	512.01	12	79.9445	Alfalfa
HEXAZINONE	February	87	2	10.3408	Alfalfa
HEXAZINONE	November	93.6	1	32.7502	Wheat
HEXAZINONE	November	1149.81	17	510.823	Alfalfa
HEXAZINONE	December	82	1	26.0844	Alfalfa
LAMBDA-CYHALOTHRIN	January	341.06	8	10.1457	Alfalfa
LAMBDA-CYHALOTHRIN	February	1636.44	37	95.3662	Alfalfa
MCPA, DIMETHYLAMINE SALT	January	140	1	84.9752	Oats
MCPA, DIMETHYLAMINE SALT	February	40	1	22.6026	Corn
MCPA, DIMETHYLAMINE SALT	February	163.5	3	90.9491	Wheat
MCPA, DIMETHYLAMINE SALT	December	100	2	88.5906	Oats
MCPA, DIMETHYLAMINE SALT	December	548.6	8	303.777	Wheat
METHOMYL	September	372	4	167.4	Alfalfa
METHOMYL	October	88.27	2	79.443	Tomatos
OXYFLUORFEN	January	436	5	221.347	Cotton
OXYFLUORFEN	January	152.9	1	4.7957	Tomatos
OXYFLUORFEN	February	1703.2	18	648.528	Tomatos
OXYFLUORFEN	November	71	2	36.0516	Wheat
OXYFLUORFEN	November	238.39	5	120.684	Melons
OXYFLUORFEN	November	3034.4	36	1452.19	Cotton
OXYFLUORFEN	November	1281.19	19	600.514	Tomatos
OXYFLUORFEN	November	755.5	13	365.06	Corn
OXYFLUORFEN	November	967.1	12	482.598	Alfalfa
OXYFLUORFEN	December	21.7	1	11.0186	Melons
OXYFLUORFEN	December	832.4	7	420.382	Tomatos
OXYFLUORFEN	December	100	1	100.328	Right of Way
OXYFLUORFEN	December	426.1	6	177.962	Alfalfa
PARAQUAT DICHLORIDE	January	134.6	2	93.1662	Alfalfa
PARAQUAT DICHLORIDE	February	198.5	2	151.405	Alfalfa
PARAQUAT DICHLORIDE	September	1580.9	32	1014.27	Cotton

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PARAQUAT DICHLORIDE	September	190.63	5	45.2393	Alfalfa
PARAQUAT DICHLORIDE	October	4801.75	78	1940.50	Cotton
PARAQUAT DICHLORIDE	November	1149.81	17	302.979	Alfalfa
PARAQUAT DICHLORIDE	November	93.6	1	7.7443	Wheat
PARAQUAT DICHLORIDE	December	82	1	42.5671	Alfalfa
PENDIMETHALIN	January	1786.08	31	4587.76	Alfalfa
PENDIMETHALIN	January	93.6	1	177.263	Wheat
PENDIMETHALIN	February	182	6	509.467	Alfalfa
PENDIMETHALIN	November	808.75	9	765.864	Alfalfa
PENDIMETHALIN	November	93.6	1	88.6316	Wheat
PENDIMETHALIN	December	82	1	155.302	Alfalfa
PERMETHRIN	September	55.9	1	8.385	Melons
PROMETRYN	November	408.2	6	589.197	Corn
PROMETRYN	November	1949	19	2813.28	Cotton
SODIUM CHLORATE	September	541.7	11	1243	Cotton
SODIUM CHLORATE	October	831.35	22	3087.17	Cotton
THIDIAZURON	September	338	4	20.1492	Corn
THIDIAZURON	September	7992.62	145	441.455	Cotton
THIDIAZURON	October	176.7	5	13.2494	Cotton
TRIFLURALIN	February	51.5	2	103	Alfalfa
TRIFLURALIN	October	263	7	261.416	Corn
TRIFLURALIN	October	156	6	155.061	Cotton

Monitoring Site **Salt Slough at Sand Dam**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	September	884.6	11	19.7619	Tomatos
(S)-CYPERMETHRIN	October	72.2	2	1.7734	Tomatos
2,4-D, DIMETHYLAMINE SALT	February	189	4	164.291	Wheat
BETA-CYFLUTHRIN	February	641.2	8	15.0707	Alfalfa
BIFENTHRIN	September	79	3	7.8458	Melons
BIFENTHRIN	September	884.6	11	59.2857	Tomatos
BIFENTHRIN	October	72.2	2	5.3202	Tomatos
CARFENTRAZONE-ETHYL	December	169	2	2.4736	Wheat
CHLORPYRIFOS	February	1101.6	19	851.622	Alfalfa
CHLORPYRIFOS	September	372	4	186.274	Alfalfa
CLETHODIM	September	40.5	1	7.419	Tomatos
CLETHODIM	October	202	4	53.8054	Alfalfa
CYFLUTHRIN	February	89.2	3	3.9349	Alfalfa
CYFLUTHRIN	September	529.63	12	13.7945	Cotton
CYFLUTHRIN	September	169	2	5.356	Corn
DICAMBA, DIMETHYLAMINE SALT	February	127.5	2	36.4406	Wheat

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

DIMETHOATE	January	341.06	8	168.722	Alfalfa
DIMETHOATE	February	1987.03	36	910.691	Alfalfa
DIURON	January	181.26	3	308.425	Alfalfa
DIURON	September	338	4	10.0744	Corn
DIURON	September	7314.72	133	200.022	Cotton
DIURON	October	176.7	5	6.6247	Cotton
DIURON	November	622.38	12	678.637	Alfalfa
DIURON	November	93.6	1	112.315	Wheat
DIURON	December	100	1	400	Right of Way
ESFENVALERATE	September	658.17	10	32.1856	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	20	1	19.9829	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	January	169.5	2	215.302	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	90.6	1	113.259	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	February	72	2	143.877	Melons
GLYPHOSATE, ISOPROPYLAMINE SALT	September	100	1	96.4822	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	September	288.8	7	361.031	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	October	92.5	2	121.461	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	October	101.8	11	98.2188	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	November	145.3	5	217.757	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	November	240.9	3	318.574	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	December	373	1	373.064	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	December	231.8	2	240.041	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	December	100	1	149.872	Right of Way
GLYPHOSATE, POTASSIUM SALT	January	152.9	1	184.534	Tomatos
GLYPHOSATE, POTASSIUM SALT	February	274.69	7	413.754	Alfalfa
GLYPHOSATE, POTASSIUM SALT	February	92.7	3	111.879	Tomatos
GLYPHOSATE, POTASSIUM SALT	September	16.2	1	893.709	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	133.1	5	11.4763	Cotton
GLYPHOSATE, POTASSIUM SALT	November	69	1	47.6093	Tomatos
GLYPHOSATE, POTASSIUM SALT	December	273	4	282.346	Tomatos
GLYPHOSATE, POTASSIUM SALT	December	639	11	660.931	Cotton
GLYPHOSATE, POTASSIUM SALT	December	26	2	26.894	Alfalfa
HEXAZINONE	January	406.41	8	63.4612	Alfalfa
HEXAZINONE	February	35	1	5.4678	Alfalfa
HEXAZINONE	November	622.38	12	326.266	Alfalfa
HEXAZINONE	November	93.6	1	32.7502	Wheat
HEXAZINONE	December	82	1	26.0844	Alfalfa
LAMBDA-CYHALOTHRIN	January	341.06	8	10.1457	Alfalfa
LAMBDA-CYHALOTHRIN	February	1530.84	33	92.5203	Alfalfa
MCPA, DIMETHYLAMINE SALT	February	127.5	2	70.6068	Wheat
MCPA, DIMETHYLAMINE SALT	December	548.6	8	303.777	Wheat
METHOMYL	September	372	4	167.4	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

METHOMYL	October	88.27	2	79.443	Tomatos
OXYFLUORFEN	January	152.9	1	4.7957	Tomatos
OXYFLUORFEN	January	436	5	221.347	Cotton
OXYFLUORFEN	November	768.7	9	381.856	Alfalfa
OXYFLUORFEN	November	661.4	10	317.279	Corn
OXYFLUORFEN	November	1281.19	19	600.514	Tomatos
OXYFLUORFEN	November	2104.7	25	1000.04	Cotton
OXYFLUORFEN	November	238.39	5	120.684	Melons
OXYFLUORFEN	November	32.5	1	16.5025	Wheat
OXYFLUORFEN	December	100	1	100.328	Right of Way
OXYFLUORFEN	December	21.7	1	11.0186	Melons
OXYFLUORFEN	December	251.6	4	97.2886	Alfalfa
OXYFLUORFEN	December	832.4	7	420.382	Tomatos
PARAQUAT DICHLORIDE	January	134.6	2	93.1662	Alfalfa
PARAQUAT DICHLORIDE	February	198.5	2	151.405	Alfalfa
PARAQUAT DICHLORIDE	September	26	2	17.9958	Alfalfa
PARAQUAT DICHLORIDE	September	1432.6	27	937.308	Cotton
PARAQUAT DICHLORIDE	October	4030.45	67	1540.11	Cotton
PARAQUAT DICHLORIDE	November	93.6	1	7.7443	Wheat
PARAQUAT DICHLORIDE	November	622.38	12	259.338	Alfalfa
PARAQUAT DICHLORIDE	December	82	1	42.5671	Alfalfa
PENDIMETHALIN	January	93.6	1	177.263	Wheat
PENDIMETHALIN	January	1153.05	22	3188.83	Alfalfa
PENDIMETHALIN	February	130	5	312.498	Alfalfa
PENDIMETHALIN	November	281.32	4	266.399	Alfalfa
PENDIMETHALIN	November	93.6	1	88.6316	Wheat
PENDIMETHALIN	December	82	1	155.302	Alfalfa
PERMETHRIN	September	55.9	1	8.385	Melons
PROMETRYN	November	1510.4	16	2180.17	Cotton
PROMETRYN	November	408.2	6	589.197	Corn
SODIUM CHLORATE	September	541.7	11	1243	Cotton
SODIUM CHLORATE	October	831.35	22	3087.17	Cotton
THIDIAZURON	September	338	4	20.1492	Corn
THIDIAZURON	September	7314.72	133	400.045	Cotton
THIDIAZURON	October	176.7	5	13.2494	Cotton
TRIFLURALIN	February	51.5	2	103	Alfalfa
TRIFLURALIN	October	156	6	155.061	Cotton
TRIFLURALIN	October	263	7	261.416	Corn

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

Monitoring Site **San Joaquin River at Lander**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	518.3	9	459.881	Wheat
2,4-D, DIMETHYLAMINE SALT	December	38.8	1	32.7683	Wheat
BETA-CYFLUTHRIN	January	43	1	1.0133	Alfalfa
BETA-CYFLUTHRIN	February	733.1	8	17.2589	Alfalfa
BROMOXYNIL HEPTANOATE	February	127.2	2	21.8856	Alfalfa
BROMOXYNIL OCTANOATE	February	127.2	2	22.6962	Alfalfa
BROMOXYNIL OCTANOATE	November	121.6	2	43.1156	Alfalfa
CARFENTRAZONE-ETHYL	January	130	1	2.0936	Oats
CARFENTRAZONE-ETHYL	February	368.1	5	5.3926	Wheat
CARFENTRAZONE-ETHYL	December	169	2	2.4736	Wheat
CHLORPYRIFOS	February	2737.3	38	2365.47	Alfalfa
CHLORPYRIFOS	February	371.9	5	94.5184	Wheat
CHLORPYRIFOS	September	327	5	163.761	Alfalfa
CLETHODIM	February	127.2	2	25.3904	Alfalfa
CLETHODIM	October	382.3	4	76.3416	Alfalfa
CLETHODIM	November	65.2	1	12.832	Alfalfa
CYFLUTHRIN	February	303.2	7	13.4069	Alfalfa
CYFLUTHRIN	September	1291.6	20	37.9432	Cotton
CYFLUTHRIN	September	71.1	1	2.2534	Tomatos
CYFLUTHRIN	September	169	2	5.356	Corn
DIMETHOATE	January	1146.01	11	559.419	Alfalfa
DIMETHOATE	February	371.9	5	138.989	Wheat
DIMETHOATE	February	1261.1	20	587.531	Alfalfa
DIURON	January	78.1	1	117.236	Alfalfa
DIURON	September	338	4	10.0744	Corn
DIURON	September	5222.4	72	145.704	Cotton
DIURON	September	71.1	1	3.259	Tomatos
DIURON	October	784.72	7	34.1673	Cotton
DIURON	November	2029.55	25	2214.86	Alfalfa
DIURON	November	93.6	1	112.315	Wheat
DIURON	December	100	1	400	Right of Way
DIURON	December	205.7	2	308.825	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	106.7	2	106.629	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	February	40	1	39.9658	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	February	1345.2	12	1345.41	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	September	100	1	96.4822	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	September	232.1	7	290.149	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	October	92.5	2	121.461	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	October	341.8	35	329.776	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	November	424.75	5	495.558	Cotton
GLYPHOSATE, ISOPROPYLAMINE SALT	November	912.2	12	1363.10	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	December	150	2	224.808	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	December	865	3	865.148	Tomatos
GLYPHOSATE, POTASSIUM SALT	January	152.9	1	184.534	Tomatos
GLYPHOSATE, POTASSIUM SALT	February	64	2	88.2676	Alfalfa
GLYPHOSATE, POTASSIUM SALT	February	87.1	2	105.038	Tomatos
GLYPHOSATE, POTASSIUM SALT	March	67.9	1	93.6187	Tomatos
GLYPHOSATE, POTASSIUM SALT	November	43	1	59.3047	Alfalfa
GLYPHOSATE, POTASSIUM SALT	December	161	2	166.495	Alfalfa
HEXAZINONE	January	78.1	1	3.6585	Alfalfa
HEXAZINONE	November	93.6	1	32.7502	Wheat
HEXAZINONE	November	2029.55	25	1061.03	Alfalfa
HEXAZINONE	December	1555.5	19	451.024	Alfalfa
IMAZAMOX, AMMONIUM SALT	November	186.8	3	9.4208	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	February	127.2	2	12.6191	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	November	43	1	2.8372	Alfalfa
LAMBDA-CYHALOTHRIN	January	1103.01	10	32.8114	Alfalfa
LAMBDA-CYHALOTHRIN	February	511.6	9	14.0444	Alfalfa
MALATHION	February	208	2	261.315	Alfalfa
MCPA, DIMETHYLAMINE SALT	January	130	1	53.9849	Oats
MCPA, DIMETHYLAMINE SALT	January	861.2	12	476.928	Wheat
MCPA, DIMETHYLAMINE SALT	February	368.1	5	206.707	Wheat
MCPA, DIMETHYLAMINE SALT	November	133	3	75.2884	Wheat
MCPA, DIMETHYLAMINE SALT	December	748.82	10	414.649	Wheat
METHOMYL	September	170.4	3	76.68	Alfalfa
OXYFLUORFEN	January	152.9	1	4.7957	Tomatos
OXYFLUORFEN	February	1345.2	12	512.246	Tomatos
OXYFLUORFEN	March	67.9	1	3.1904	Tomatos
OXYFLUORFEN	November	114.1	2	57.9365	Melons
OXYFLUORFEN	November	475.4	4	241.394	Alfalfa
OXYFLUORFEN	November	3325.32	43	1537.34	Tomatos
OXYFLUORFEN	November	102.41	1	47.3476	Wheat
OXYFLUORFEN	November	243.4	6	118.163	Corn
OXYFLUORFEN	November	2903.65	35	1367.14	Cotton
OXYFLUORFEN	December	865	3	433.921	Tomatos
OXYFLUORFEN	December	161	2	80.7644	Alfalfa
OXYFLUORFEN	December	21.7	1	11.0186	Melons
OXYFLUORFEN	December	150	2	105.345	Right of Way
PARAQUAT DICHLORIDE	January	134.6	2	93.1662	Alfalfa
PARAQUAT DICHLORIDE	February	117.5	1	81.3287	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PARAQUAT DICHLORIDE	September	106.4	4	55.2058	Cotton
PARAQUAT DICHLORIDE	October	3304	41	959.466	Cotton
PARAQUAT DICHLORIDE	November	2029.55	25	840.098	Alfalfa
PARAQUAT DICHLORIDE	November	93.6	1	7.7443	Wheat
PARAQUAT DICHLORIDE	December	1349.8	17	618.223	Alfalfa
PENDIMETHALIN	January	93.6	1	177.263	Wheat
PENDIMETHALIN	January	2029.55	25	3843.83	Alfalfa
PENDIMETHALIN	November	93.6	1	88.6316	Wheat
PENDIMETHALIN	November	926.54	15	877.422	Alfalfa
PENDIMETHALIN	December	1349.8	17	2377.45	Alfalfa
PERMETHRIN	September	55.9	1	8.385	Melons
PROMETRYN	November	119.4	4	172.343	Corn
PROMETRYN	November	78.1	1	112.726	Tomatos
PROMETRYN	November	2359.65	28	3406.07	Cotton
PROMETRYN	November	102.41	1	147.83	Wheat
THIDIAZURON	September	5222.4	72	291.408	Cotton
THIDIAZURON	September	71.1	1	6.5179	Tomatos
THIDIAZURON	September	338	4	20.1492	Corn
THIDIAZURON	October	784.72	7	68.3343	Cotton
TRIFLURALIN	January	87	1	174	Alfalfa
TRIFLURALIN	February	265.5	6	531	Alfalfa

County **San Joaquin**

Monitoring Site **Blewett Drain at Highway 13**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
COPPER SULFATE (BASIC)	December	154	1	661.23	Apricots
GLYPHOSATE, POTASSIUM SALT	December	20	1	27.5836	Apricots
OXYFLUORFEN	November	7	1	9.3715	Apricots
OXYFLUORFEN	December	40	2	34.4536	Apricots
PARAQUAT DICHLORIDE	November	70	1	92.5179	Apricots

Monitoring Site **Hospital Creek at River Roa**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
CARFENTRAZONE-ETHYL	October	112.74	4	3.2795	Almonds
COPPER SULFATE (BASIC)	December	308	2	1322.46	Apricots
DIURON	November	60	2	240.237	NA
ESFENVALERATE	September	38	1	1.8546	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	September	69.2	2	138.424	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	October	2.18	1	4.3563	Grapes
GLYPHOSATE, ISOPROPYLAMINE SALT	October	226.84	7	342.329	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	November	412.17	7	728.890	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	69.2	2	138.424	Apricots
GLYPHOSATE, POTASSIUM SALT	December	40	2	55.1672	Apricots
MALATHION	September	38	1	38.8459	Tomatos
OXYFLUORFEN	September	69.2	2	17.3568	Apricots
OXYFLUORFEN	October	2.18	1	0.5418	Grapes
OXYFLUORFEN	October	114.1	3	7.5673	Almonds
OXYFLUORFEN	November	14	2	18.743	Apricots
OXYFLUORFEN	November	412.17	7	275.15	Almonds
OXYFLUORFEN	December	149.2	6	139.183	Apricots
PARAQUAT DICHLORIDE	November	140	2	185.036	Apricots
PENDIMETHALIN	November	335.82	5	1398.59	Almonds
PENDIMETHALIN	December	69.2	2	131.06	Apricots
SETHOXYDIM	October	40	1	7.0097	Almonds

County **Stanislaus**

Monitoring Site **Blewett Drain at Highway 13**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	December	37.64	1	61.5485	Almonds
ESFENVALERATE	September	40	1	1.9522	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	80.94	3	109.786	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	January	22.92	1	22.9004	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	100	1	199.829	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	110.92	4	132.469	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	64.64	2	96.8772	Almonds
LAMBDA-CYHALOTHRIN	September	2	2	0.0656	Cherrys
ORYZALIN	January	22.92	1	35.757	Walnuts
ORYZALIN	December	27	1	42.1221	Almonds
OXYFLUORFEN	January	80.94	3	32.5867	Almonds
OXYFLUORFEN	January	22.92	1	33.5994	Walnuts
OXYFLUORFEN	November	70.01	3	48.1522	Almonds
OXYFLUORFEN	December	64.64	2	58.4622	Almonds
PENDIMETHALIN	January	40	1	75.7572	Almonds
PENDIMETHALIN	November	29.1	2	82.67	Almonds

Monitoring Site **Del Puerto Creek at Hwy 33**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	13	2	28.9511	Cherrys
2,4-D, DIMETHYLAMINE SALT	February	150	3	68.5696	Apricots
2,4-D, DIMETHYLAMINE SALT	February	308	6	140.796	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

2,4-D, DIMETHYLAMINE SALT	October	30	2	135.034	Fallow
2,4-D, DIMETHYLAMINE SALT	November	80	2	90.0228	Fallow
BIFENTHRIN	September	65	3	6.4889	Melons
BIFENTHRIN	October	40	2	4.006	Melons
CHLORPYRIFOS	February	407	6	191.163	Alfalfa
CLETHODIM	September	172	2	36.6688	Alfalfa
COPPER SULFATE (PENTAHYDRATE)	January	136	2	1346.4	Apricots
COPPER SULFATE (PENTAHYDRATE)	January	34	2	336.6	Cherrys
DIMETHOATE	January	43	2	21.4043	Alfalfa
DIMETHOATE	February	304	3	150.957	Alfalfa
DIURON	February	30	2	78.222	Right of Way
ESFENVALERATE	January	160	4	9.8262	Apricots
ESFENVALERATE	February	319	10	12.969	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	January	16.5	1	16.4828	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	February	322	7	185.615	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	150	3	86.8341	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	September	10	3	4.824	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	68	1	102.122	Grapes
GLYPHOSATE, ISOPROPYLAMINE SALT	October	100	2	100.017	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	October	440	4	275.047	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	158	4	694.672	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	50	1	72.3617	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	80	2	308.743	Fallow
GLYPHOSATE, POTASSIUM SALT	February	13	2	34.2037	Cherrys
GLYPHOSATE, POTASSIUM SALT	February	30	2	165.502	Right of Way
HEXAZINONE	January	43	2	32.818	Alfalfa
LAMBDA-CYHALOTHRIN	February	884	13	20.1421	Apricots
LAMBDA-CYHALOTHRIN	February	798	8	19.7822	Peaches
LAMBDA-CYHALOTHRIN	February	407	6	12.7926	Alfalfa
METHIDATHION	January	34	2	68.0138	Cherrys
METHOMYL	September	40	2	18	Melons
ORYZALIN	February	102	2	212.171	Almonds
OXYFLUORFEN	January	16.5	1	8.2671	Apricots
OXYFLUORFEN	February	40	2	6.8405	Walnuts
OXYFLUORFEN	September	68	1	3.198	Grapes
OXYFLUORFEN	September	17.5	1	8.7191	Almonds
OXYFLUORFEN	October	100	2	12.541	Cherrys
OXYFLUORFEN	October	440	4	27.5904	Almonds
OXYFLUORFEN	November	19.6	1	6.8975	Almonds
PARAQUAT DICHLORIDE	January	235	4	19.4443	Alfalfa
PARAQUAT DICHLORIDE	September	17.5	1	22.6155	Almonds
PARAQUAT DICHLORIDE	October	19.2	2	17.27	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PARAQUAT DICHLORIDE	November	19.6	1	25.2471	Almonds
PARAQUAT DICHLORIDE	December	112	1	83.5516	Alfalfa
PENDIMETHALIN	January	16.5	1	15.606	Apricots
PENDIMETHALIN	January	43	2	40.7195	Alfalfa
PENDIMETHALIN	February	13	2	64.3936	Cherrys
PENDIMETHALIN	December	112	1	106.060	Alfalfa
PHENMEDIPHAM	January	90	2	44.2088	Spinach
PROMETRYN	December	354	4	681.307	Spice
RIMSULFURON	February	102	2	6.375	Almonds
RIMSULFURON	October	440	4	13.75	Almonds

Monitoring Site **Del Puerto Creek near Cox**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	13	2	28.9511	Cherrys
2,4-D, DIMETHYLAMINE SALT	February	45	3	50.7957	Turf grass
2,4-D, DIMETHYLAMINE SALT	February	270	5	123.425	Apricots
2,4-D, DIMETHYLAMINE SALT	February	308	6	140.796	Almonds
2,4-D, DIMETHYLAMINE SALT	October	30	2	135.034	Fallow
2,4-D, DIMETHYLAMINE SALT	November	80	2	90.0228	Fallow
2,4-D, DIMETHYLAMINE SALT	November	29	2	32.6333	Turf grass
BIFENTHRIN	September	86	2	6.7101	Beans
BIFENTHRIN	September	65	3	6.4889	Melons
BIFENTHRIN	October	40	2	4.006	Melons
BROMOXYNIL HEPTANOATE	February	90	2	15.485	Alfalfa
BROMOXYNIL OCTANOATE	January	30	1	10.6441	Oats
BROMOXYNIL OCTANOATE	February	90	2	16.0586	Alfalfa
CHLORPYRIFOS	February	696.5	18	332.28	Alfalfa
CHLORPYRIFOS	October	13	1	36.6392	Turf grass
CHLORPYRIFOS	December	600	2	1212.04	Almonds
CLETHODIM	September	172	2	36.6688	Alfalfa
COPPER SULFATE (PENTAHYDRATE)	January	136	2	1346.4	Apricots
COPPER SULFATE (PENTAHYDRATE)	January	34	2	336.6	Cherrys
CYFLUTHRIN	September	29.95	2	0.9016	Beans
DIMETHOATE	January	354.5	12	176.546	Alfalfa
DIMETHOATE	February	840	18	417.274	Alfalfa
DIMETHOATE	September	177.95	9	88.2371	Beans
DIMETHOATE	September	60	1	29.6823	Alfalfa
DIURON	January	51	3	50.1723	Alfalfa
DIURON	February	30	2	78.222	Right of Way
ESFENVALERATE	January	160	4	9.8262	Apricots
ESFENVALERATE	February	396	14	16.1445	Apricots

***Includes duplicate and incomplete data**
**** Not available in all counties.**

GLYPHOSATE, ISOPROPYLAMINE SALT	January	31.5	3	31.4854	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	January	600	2	1498.72	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	270	5	156.301	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	February	123	3	106.268	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	362	8	245.625	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	16	1	20.0034	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	18	1	39.0466	Turf grass
GLYPHOSATE, ISOPROPYLAMINE SALT	September	68	1	102.122	Grapes
GLYPHOSATE, ISOPROPYLAMINE SALT	September	10	3	4.824	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	October	50	1	72.3617	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	October	273	5	1154.75	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	111	3	117.702	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	October	590	7	575.098	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	107	1	428.073	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	October	19	1	76.0908	Turf grass
GLYPHOSATE, ISOPROPYLAMINE SALT	November	419.4	9	696.919	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	80	2	308.743	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	December	5.4	1	8.1131	Walnuts
GLYPHOSATE, POTASSIUM SALT	January	120	1	187.198	Almonds
GLYPHOSATE, POTASSIUM SALT	February	13	2	34.2037	Cherrys
GLYPHOSATE, POTASSIUM SALT	February	30	2	165.502	Right of Way
HEXAZINONE	January	307	12	209.632	Alfalfa
HEXAZINONE	December	170	2	129.786	Alfalfa
IMAZAMOX, AMMONIUM SALT	February	81	2	2.724	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	February	81	2	5.3736	Alfalfa
ISOXABEN	October	11	1	4.5825	Cherrys
LAMBDA-CYHALOTHRIN	January	46	2	1.225	Alfalfa
LAMBDA-CYHALOTHRIN	February	798	8	19.7822	Peaches
LAMBDA-CYHALOTHRIN	February	802.5	20	23.8274	Alfalfa
LAMBDA-CYHALOTHRIN	February	944	14	21.6295	Apricots
LAMBDA-CYHALOTHRIN	September	230	3	6.6492	Tomatos
LAMBDA-CYHALOTHRIN	September	62	5	1.9504	Beans
MALATHION	February	19	1	24.2787	Alfalfa
MCPA, DIMETHYLAMINE SALT	January	30	1	16.9519	Oats
MCPA, DIMETHYLAMINE SALT	January	18	2	5.063	Wheat
METHIDATHION	January	34	2	68.0138	Cherrys
METHOMYL	January	46	2	20.7	Alfalfa
METHOMYL	September	40	2	18	Melons
METHOMYL	September	80	1	54	Tomatos
ORYZALIN	February	102	2	212.171	Almonds
ORYZALIN	October	11	1	25.4189	Cherrys
ORYZALIN	November	56	2	174.729	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

ORYZALIN	December	5.4	1	20.801	Walnuts
OXYFLUORFEN	January	31.5	3	15.7917	Apricots
OXYFLUORFEN	January	720	3	970.964	Almonds
OXYFLUORFEN	February	40	1	9.6012	Almonds
OXYFLUORFEN	February	40	2	6.8405	Walnuts
OXYFLUORFEN	September	47.05	2	38.7384	Almonds
OXYFLUORFEN	September	68	1	3.198	Grapes
OXYFLUORFEN	October	590	7	140.48	Almonds
OXYFLUORFEN	October	5.4	1	2.7623	Walnuts
OXYFLUORFEN	October	100	2	12.541	Cherrys
OXYFLUORFEN	November	306	8	217.978	Almonds
OXYFLUORFEN	December	5.4	1	10.0328	Walnuts
PARAQUAT DICHLORIDE	January	579	16	45.8027	Alfalfa
PARAQUAT DICHLORIDE	February	50	2	104.439	Almonds
PARAQUAT DICHLORIDE	February	15	1	10.3822	Alfalfa
PARAQUAT DICHLORIDE	February	13.18	1	13.786	Walnuts
PARAQUAT DICHLORIDE	September	29	1	40.2555	Walnuts
PARAQUAT DICHLORIDE	September	47.05	2	27.5072	Almonds
PARAQUAT DICHLORIDE	October	19.2	2	17.27	Almonds
PARAQUAT DICHLORIDE	October	5.4	1	5.6202	Walnuts
PARAQUAT DICHLORIDE	November	55.05	2	31.1152	Almonds
PARAQUAT DICHLORIDE	December	150	2	109.853	Alfalfa
PENDIMETHALIN	January	31.5	3	29.8104	Apricots
PENDIMETHALIN	January	424.5	15	525.424	Alfalfa
PENDIMETHALIN	February	15	1	28.4089	Alfalfa
PENDIMETHALIN	February	13.18	1	24.962	Walnuts
PENDIMETHALIN	February	13	2	64.3936	Cherrys
PENDIMETHALIN	October	150	3	568.179	Almonds
PENDIMETHALIN	November	301.85	7	1138.82	Almonds
PENDIMETHALIN	December	320	4	499.997	Alfalfa
PHENMEDIPHAM	January	90	2	44.2088	Spinach
PROMETRYN	December	354	4	681.307	Spice
RIMSULFURON	February	102	2	6.375	Almonds
RIMSULFURON	October	440	4	13.75	Almonds
SIMAZINE	February	50	2	49.9544	Almonds

Monitoring Site **Hospital Creek at River Roa**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	November	82.3	4	89.7174	Almonds
2,4-D, DIMETHYLAMINE SALT	December	37.64	1	61.5485	Almonds
CARFENTRAZONE-ETHYL	February	10.52	2	0.154	Cherrys

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

CARFENTRAZONE-ETHYL	February	190	2	2.7818	Wheat
CARFENTRAZONE-ETHYL	September	9	4	0.1318	Nectarines
CARFENTRAZONE-ETHYL	September	10.52	2	0.308	Cherrys
CARFENTRAZONE-ETHYL	September	3	2	0.044	Peaches
CARFENTRAZONE-ETHYL	November	10.52	2	0.231	Cherrys
CHLORPYRIFOS	January	50	2	101.003	Almonds
CHLORPYRIFOS	December	60	1	121.204	Almonds
DIMETHOATE	February	455	8	224.912	Alfalfa
DIMETHOATE	September	275	3	131.269	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	January	45.84	2	45.8008	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	January	154.22	5	275.125	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	10.52	2	15.7826	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	February	490.94	8	240.925	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	September	9	4	8.6834	Nectarines
GLYPHOSATE, ISOPROPYLAMINE SALT	September	7.5	4	7.7186	Peaches
GLYPHOSATE, ISOPROPYLAMINE SALT	September	100	1	199.829	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	424.36	4	887.206	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	40	1	160.273	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	November	10.52	2	21.0436	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	November	411.03	17	626.267	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	5	2	4.8242	Nectarines
GLYPHOSATE, ISOPROPYLAMINE SALT	November	10.9	2	16.3598	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	November	15.75	1	23.6391	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	December	217.75	6	304.998	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	47	1	117.42	Walnuts
GLYPHOSATE, POTASSIUM SALT	January	167.64	1	462.412	Grapes
GLYPHOSATE, POTASSIUM SALT	February	20	2	27.5836	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	20	2	27.5836	Alfalfa
GLYPHOSATE, POTASSIUM SALT	November	530	1	292.386	Grapes
LAMBDA-CYHALOTHRIN	February	30	2	0.799	Apricots
LAMBDA-CYHALOTHRIN	September	3	4	0.0984	Cherrys
METHOMYL	September	95	1	7.344	Alfalfa
METRIBUZIN	November	139	2	34.4025	Fallow
ORYZALIN	January	22.22	2	46.2616	Almonds
ORYZALIN	January	45.84	2	71.514	Walnuts
ORYZALIN	December	137.25	4	214.121	Almonds
OXYFLUORFEN	January	167.64	1	170.245	Grapes
OXYFLUORFEN	January	45.84	2	67.1988	Walnuts
OXYFLUORFEN	January	132	3	116.049	Almonds
OXYFLUORFEN	February	45	1	11.4147	Almonds
OXYFLUORFEN	October	170.94	1	85.7607	Grapes
OXYFLUORFEN	October	381.5	3	136.567	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	November	10.9	2	2.734	Apricots
OXYFLUORFEN	November	78	1	29.3461	Fallow
OXYFLUORFEN	November	370.12	16	123.426	Almonds
OXYFLUORFEN	November	62.75	2	51.6808	Walnuts
OXYFLUORFEN	December	217.75	6	241.593	Almonds
PARAQUAT DICHLORIDE	September	10.52	2	14.5628	Cherrys
PARAQUAT DICHLORIDE	October	170.94	1	28.2878	Grapes
PARAQUAT DICHLORIDE	December	185	3	164.492	Alfalfa
PENDIMETHALIN	January	40	1	75.7572	Almonds
PENDIMETHALIN	January	167.64	1	634.997	Grapes
PENDIMETHALIN	February	45	1	85.2268	Almonds
PENDIMETHALIN	October	81.5	1	308.711	Almonds
PENDIMETHALIN	November	47	1	89.0147	Walnuts
PENDIMETHALIN	November	61	1	57.7649	Fallow
PENDIMETHALIN	November	10.52	2	39.8482	Cherrys
PENDIMETHALIN	November	111.4	6	238.540	Almonds
PENDIMETHALIN	December	185	3	350.377	Alfalfa
PENDIMETHALIN	December	42.86	1	81.1738	Almonds
RIMSULFURON	February	10.52	2	0.6576	Cherrys
SAFLUFENACIL	February	280	2	12.25	Almonds
SIMAZINE	November	82.3	4	164.450	Almonds

Monitoring Site **Ingram Creek at River Road**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	36	3	39.2445	Almonds
2,4-D, DIMETHYLAMINE SALT	November	153.2	9	153.926	Almonds
2,4-D, DIMETHYLAMINE SALT	December	13.82	1	22.5983	Almonds
CARFENTRAZONE-ETHYL	February	10.52	2	0.154	Cherrys
CARFENTRAZONE-ETHYL	February	190	2	2.7818	Wheat
CARFENTRAZONE-ETHYL	September	3	2	0.044	Peaches
CARFENTRAZONE-ETHYL	September	10.52	2	0.308	Cherrys
CARFENTRAZONE-ETHYL	September	9	4	0.1318	Nectarines
CARFENTRAZONE-ETHYL	November	27.36	4	0.6008	Cherrys
CHLORPYRIFOS	January	50	2	101.003	Almonds
CHLORPYRIFOS	September	252	4	432.214	Walnuts
DIMETHOATE	February	455	8	224.912	Alfalfa
DIMETHOATE	September	275	3	131.269	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	January	31	2	46.5279	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	January	56.37	2	56.3218	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	January	22.22	2	33.3316	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	10.52	2	15.7826	Cherrys

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	February	484.44	10	231.239	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	45	1	67.5315	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	7.5	4	7.7186	Peaches
GLYPHOSATE, ISOPROPYLAMINE SALT	September	70	1	270.150	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	September	25	1	25.0299	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	84	4	243.135	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	September	9	4	8.6834	Nectarines
GLYPHOSATE, ISOPROPYLAMINE SALT	October	168	3	673.147	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	424.36	4	887.206	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	363	5	1400.92	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	November	15.75	1	23.6391	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	10.9	2	16.3598	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	November	106.86	12	187.752	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	November	5	2	4.8242	Nectarines
GLYPHOSATE, ISOPROPYLAMINE SALT	November	467.38	24	769.261	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	102.33	4	126.103	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	47	1	117.42	Walnuts
GLYPHOSATE, POTASSIUM SALT	January	167.64	1	462.412	Grapes
GLYPHOSATE, POTASSIUM SALT	February	20	2	27.5836	Alfalfa
GLYPHOSATE, POTASSIUM SALT	September	20	2	27.5836	Alfalfa
GLYPHOSATE, POTASSIUM SALT	November	530	1	292.386	Grapes
GLYPHOSATE, POTASSIUM SALT	November	5.5	1		Cherrys
LAMBDA-CYHALOTHRIN	February	30	2	0.799	Apricots
LAMBDA-CYHALOTHRIN	September	60	1	1.6146	Beans
LAMBDA-CYHALOTHRIN	September	80	2	2.3798	Tomatos
LAMBDA-CYHALOTHRIN	September	1	2	0.0328	Cherrys
METHOMYL	September	95	1	7.344	Alfalfa
METRIBUZIN	November	139	2	34.4025	Fallow
METRIBUZIN	December	230	3	56.925	Fallow
ORYZALIN	January	56.37	2	117.256	Apricots
ORYZALIN	January	22.22	2	46.2616	Almonds
ORYZALIN	November	5.5	1	17.1609	Cherrys
ORYZALIN	December	33.75	1	52.6526	Almonds
OXYFLUORFEN	January	31	2	12.3003	Walnuts
OXYFLUORFEN	January	56.37	2	14.1388	Apricots
OXYFLUORFEN	January	167.64	1	170.245	Grapes
OXYFLUORFEN	February	45	1	11.4147	Almonds
OXYFLUORFEN	February	45	1	11.297	Walnuts
OXYFLUORFEN	September	30	3	15.0492	Cherrys
OXYFLUORFEN	October	24.99	3	3.1341	Walnuts
OXYFLUORFEN	October	170.94	1	85.7607	Grapes
OXYFLUORFEN	October	381.5	3	136.567	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	November	420.48	22	102.455	Almonds
OXYFLUORFEN	November	62.75	2	51.6808	Walnuts
OXYFLUORFEN	November	10.9	2	2.734	Apricots
OXYFLUORFEN	November	79.5	8	39.8806	Cherrys
OXYFLUORFEN	November	78	1	29.3461	Fallow
OXYFLUORFEN	December	305	4	114.761	Fallow
OXYFLUORFEN	December	102.33	4	83.8982	Almonds
PARAQUAT DICHLORIDE	February	6	1	0.7447	Cherrys
PARAQUAT DICHLORIDE	September	40.52	5	56.0918	Cherrys
PARAQUAT DICHLORIDE	September	12.5	1	1.5522	Walnuts
PARAQUAT DICHLORIDE	October	170.94	1	28.2878	Grapes
PARAQUAT DICHLORIDE	October	32.99	4	34.2899	Walnuts
PARAQUAT DICHLORIDE	December	185	3	164.492	Alfalfa
PENDIMETHALIN	January	167.64	1	634.997	Grapes
PENDIMETHALIN	February	6	1	17.0454	Cherrys
PENDIMETHALIN	February	45	1	85.2268	Almonds
PENDIMETHALIN	October	81.5	1	308.711	Almonds
PENDIMETHALIN	November	61	1	57.7649	Fallow
PENDIMETHALIN	November	106.3	7	201.325	Almonds
PENDIMETHALIN	November	101.36	11	327.12	Cherrys
PENDIMETHALIN	November	47	1	89.0147	Walnuts
PENDIMETHALIN	December	54.76	2	103.712	Almonds
PENDIMETHALIN	December	185	3	350.377	Alfalfa
RIMSULFURON	February	36	3	1.125	Almonds
RIMSULFURON	February	10.52	2	0.6576	Cherrys
SAFLUFENACIL	February	280	2	12.25	Almonds
SIMAZINE	November	106.3	7	212.406	Almonds

Monitoring Site **Marshall Road Drain near R**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	February	278	6	13.7986	Alfalfa
2,4-D, DIMETHYLAMINE SALT	January	18.54	2	20.1684	Almonds
2,4-D, DIMETHYLAMINE SALT	November	142.5	3	77.7082	Almonds
ACEPHATE	September	30	1	29.1	Beans
BIFENTHRIN	September	79	1	7.9119	Melons
BIFENTHRIN	September	40	2	3.9642	Corn
BROMOXYNIL HEPTANOATE	December	140	2	37.1862	Alfalfa
BROMOXYNIL OCTANOATE	December	140	2	38.5634	Alfalfa
CARFENTRAZONE-ETHYL	February	126	2	1.6602	Almonds
CARFENTRAZONE-ETHYL	February	15	1	0.2196	Wheat
CHLORPYRIFOS	February	40	2	30.063	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

CYFLUTHRIN	September	25	1	0.7477	Beans
DIMETHOATE	January	81	4	40.2738	Alfalfa
DIMETHOATE	February	385	8	142.694	Alfalfa
DIMETHOATE	September	55	2	27.1987	Beans
DIMETHOATE	September	150	1	74.0563	Alfalfa
ESFENVALERATE	September	60	1	2.4403	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	18.54	2	27.7862	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	40	2	40.0068	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	180	4	190.032	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	September	160	1	640.109	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	September	160	1	640.109	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	October	100	2	100.017	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	3	1	9.9915	Pasture
GLYPHOSATE, ISOPROPYLAMINE SALT	November	169.6	5	328.256	Almonds
GLYPHOSATE, POTASSIUM SALT	September	15	1	25.8734	Walnuts
HEXAZINONE	February	87	2	44.2798	Alfalfa
IMAZAMOX, AMMONIUM SALT	October	140	2	7.0656	Alfalfa
ISOXABEN	February	126	2	42.525	Almonds
LAMBDA-CYHALOTHRIN	January	140	2	4.15	Alfalfa
LAMBDA-CYHALOTHRIN	February	562	10	15.191	Alfalfa
LAMBDA-CYHALOTHRIN	September	169.7	1	5.3267	Tomatos
LAMBDA-CYHALOTHRIN	September	30	1	0.9437	Beans
LAMBDA-CYHALOTHRIN	September	148	3	5.7674	Walnuts
MCPA, DIMETHYLAMINE SALT	January	222	4	101.701	Wheat
MCPA, DIMETHYLAMINE SALT	February	15	1	9.1045	Wheat
METHOMYL	January	140	2	63	Alfalfa
METHOMYL	February	495	10	222.75	Alfalfa
METRIBUZIN	November	169.7	1	95.4525	Fallow
NORFLURAZON	February	100	2	39.3	Almonds
ORYZALIN	February	9.46	1	29.5375	Almonds
OXYFLUORFEN	February	109.46	3	60.2681	Almonds
OXYFLUORFEN	September	15	1	3.7723	Walnuts
OXYFLUORFEN	October	100	2	50.1642	Almonds
OXYFLUORFEN	November	169.7	1	42.5593	Fallow
OXYFLUORFEN	November	3	1	1.0033	Pasture
OXYFLUORFEN	November	169.6	5	166.197	Almonds
PARAQUAT DICHLORIDE	January	67	3	5.5438	Alfalfa
PARAQUAT DICHLORIDE	February	341.75	9	188.544	Almonds
PENDIMETHALIN	January	81	4	89.9616	Alfalfa
PENDIMETHALIN	February	366	8	669.315	Almonds
PENDIMETHALIN	February	282	7	563.918	Alfalfa
PENDIMETHALIN	October	140	2	132.575	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

PENDIMETHALIN	November	27.1	2	46.1361	Almonds
RIMSULFURON	January	18.54	2	0.5782	Almonds
SIMAZINE	November	142.5	3	141.769	Almonds

Monitoring Site **Newman Wasteway near Hill**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	60	1	98.1164	Pasture
2,4-D, DIMETHYLAMINE SALT	November	464	6	253.01	Almonds
CARFENTRAZONE-ETHYL	February	66	1	0.9663	Oats
CARFENTRAZONE-ETHYL	October	15	1	0.2249	Walnuts
CHLORPYRIFOS	February	240	6	135.864	Alfalfa
DIMETHOATE	January	125	2	62.2997	Alfalfa
DIMETHOATE	February	137.8	5	68.2297	Alfalfa
DIMETHOATE	September	35	1	10.8044	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	73	1	146.175	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	142	2	213.152	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	5	1	5.0085	Right of Way
GLYPHOSATE, ISOPROPYLAMINE SALT	September	85	1	127.672	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	90	2	135.023	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	659	9	1318.62	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	83	2	166.198	Almonds
GLYPHOSATE, POTASSIUM SALT	February	13.75	1	23.7219	Walnuts
GLYPHOSATE, POTASSIUM SALT	October	15	1	31.0591	Walnuts
IMAZAMOX, AMMONIUM SALT	February	55	1	1.8505	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	February	55	1	2.7293	Alfalfa
ISOXABEN	February	100	2	75	Almonds
LAMBDA-CYHALOTHRIN	February	283.8	8	8.2925	Alfalfa
METRIBUZIN	December	80	1	30	NA
NORFLURAZON	December	51	1	40.086	Almonds
OXYFLUORFEN	January	73	1	73.2398	Almonds
OXYFLUORFEN	February	5	1	1.2641	Right of Way
OXYFLUORFEN	February	100	2	38.1031	Almonds
OXYFLUORFEN	October	90	2	22.5738	Almonds
OXYFLUORFEN	November	659	9	661.165	Almonds
OXYFLUORFEN	December	80	1	30.0985	NA
OXYFLUORFEN	December	83	2	84.4442	Almonds
OXYFLUORFEN	December	130	1	24.7385	Fallow
PARAQUAT DICHLORIDE	January	78	2	4.8404	Alfalfa
PARAQUAT DICHLORIDE	February	43.8	2	29.4829	Alfalfa
PARAQUAT DICHLORIDE	February	50	1	34.6074	Almonds
PARAQUAT DICHLORIDE	September	100	1	12.4113	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PENDIMETHALIN	January	78	2	147.727	Alfalfa
PENDIMETHALIN	January	73	1	207.385	Almonds
PENDIMETHALIN	February	43.8	2	41.477	Alfalfa
PENDIMETHALIN	November	195	3	553.974	Almonds
PENDIMETHALIN	December	114	3	215.908	Alfalfa
PENDIMETHALIN	December	83	2	235.794	Almonds
PERMETHRIN	February	110	2	12.7472	Alfalfa
RIMSULFURON	November	48	1	1.5	Almonds
SAFLUFENACIL	February	13.75	1	0.602	Walnuts
SAFLUFENACIL	October	15	1	0.658	Walnuts
SIMAZINE	January	73	1	72.9336	Almonds
SIMAZINE	November	659	9	656.376	Almonds
SIMAZINE	December	83	2	82.9245	Almonds

Monitoring Site **Orestimba Creek at Hwy 33**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	January	216	6	5.451	Alfalfa
(S)-CYPERMETHRIN	February	220	2	5.4398	Alfalfa
2,4-D, DIMETHYLAMINE SALT	January	162	6	176.61	Almonds
2,4-D, DIMETHYLAMINE SALT	November	210	2	114.513	Almonds
2,4-D, DIMETHYLAMINE SALT	November	40	2	65.411	Walnuts
2,4-D, DIMETHYLAMINE SALT	December	217	4	118.263	Almonds
BETA-CYFLUTHRIN	October	150	2	0.4286	Broccoli
BIFENTHRIN	September	110	2	10.9016	Beans
BIFENTHRIN	September	240	4	17.5092	Melons
CARFENTRAZONE-ETHYL	September	75	3	2.196	Walnuts
CARFENTRAZONE-ETHYL	November	47.22	4	0.6912	Cherrys
CHLORPYRIFOS	January	216	6	54.5082	Alfalfa
CHLORPYRIFOS	February	220	2	54.398	Alfalfa
COPPER SULFATE (BASIC)	January	30	2	127.98	Cherrys
DIMETHOATE	February	690	14	309.328	Alfalfa
DIMETHOATE	September	74	4	36.8698	Beans
DIMETHOATE	September	100	2	49.3708	Broccoli
DIURON	February	24.26	4	38.5882	Walnuts
DIURON	February	54	2	11.9952	Alfalfa
DIURON	October	125.6	10	251.369	Walnuts
ESFENVALERATE	September	150	2	6.104	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	162	6	243.041	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	62.26	6	76.573	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	February	200	2	52.0088	Nursery
GLYPHOSATE, ISOPROPYLAMINE SALT	February	804.48	10	790.675	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

GLYPHOSATE, ISOPROPYLAMINE SALT	September	240	2	960.164	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	September	201	9	339.018	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	30	2	30.0358	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	September	700	9	1310.32	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	24	2	24.004	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	October	880	8	3520.60	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	40	2	40.0068	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	October	377.72	11	689.198	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	170	4	246.861	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	100	6	195.073	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	63.22	6	102.848	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	November	310	10	621.146	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	217	4	434.074	Almonds
GLYPHOSATE, POTASSIUM SALT	February	129.18	12	222.655	Walnuts
HEXAZINONE	February	54	2	13.742	Alfalfa
ISOXABEN	February	120	4	90	Almonds
ISOXABEN	February	80	2	60	Walnuts
LAMBDA-CYHALOTHRIN	February	636	12	19.126	Alfalfa
LAMBDA-CYHALOTHRIN	September	184	6	4.958	Beans
LAMBDA-CYHALOTHRIN	September	371.99	9	14.4942	Walnuts
LAMBDA-CYHALOTHRIN	October	150	2	4.4622	Broccoli
METRIBUZIN	November	720	6	135	Fallow
NORFLURAZON	January	86	2	22.3066	Walnuts
NORFLURAZON	September	400	2	235.8	Almonds
NORFLURAZON	October	140	4	82.53	Almonds
ORYZALIN	February	120	2	249.613	Almonds
ORYZALIN	September	160	2	582.429	Walnuts
OXAMYL	September	74	2	36.8372	Tomatos
OXYFLUORFEN	January	162	6	162.532	Almonds
OXYFLUORFEN	January	150	2	19.0414	Broccoli
OXYFLUORFEN	January	86	2	43.1412	Walnuts
OXYFLUORFEN	February	224.48	4	28.429	Almonds
OXYFLUORFEN	February	233.44	18	90.135	Walnuts
OXYFLUORFEN	September	150	2	28.5976	Fallow
OXYFLUORFEN	September	201	9	42.8703	Walnuts
OXYFLUORFEN	September	272	5	40.9016	Almonds
OXYFLUORFEN	October	40	2	10.0328	Apricots
OXYFLUORFEN	October	170	4	65.2134	Walnuts
OXYFLUORFEN	October	24	2	6.0198	Cherrys
OXYFLUORFEN	October	619.72	15	277.642	Almonds
OXYFLUORFEN	November	55	4	61.907	Walnuts
OXYFLUORFEN	November	1276	16	320.028	Fallow

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	November	63.22	6	75.944	Cherrys
OXYFLUORFEN	November	126	2	37.603	Beans
OXYFLUORFEN	November	292	8	261.246	Almonds
OXYFLUORFEN	December	217	4	217.713	Almonds
OXYFLUORFEN	December	300	4	77.0102	Fallow
PARAQUAT DICHLORIDE	February	200	4	135.876	Alfalfa
PARAQUAT DICHLORIDE	February	80	2	69.2148	Walnuts
PARAQUAT DICHLORIDE	February	240	8	166.005	Almonds
PARAQUAT DICHLORIDE	September	30	2	39.1856	Cherrys
PARAQUAT DICHLORIDE	September	464	4	332.363	Walnuts
PARAQUAT DICHLORIDE	September	152	6	198.315	Almonds
PARAQUAT DICHLORIDE	October	42	2	55.0996	Almonds
PENDIMETHALIN	January	86	2	162.878	Walnuts
PENDIMETHALIN	February	38	2	71.9694	Walnuts
PENDIMETHALIN	February	610.48	10	707.402	Almonds
PENDIMETHALIN	February	416	10	787.875	Alfalfa
PENDIMETHALIN	September	610	5	1155.3	Almonds
PENDIMETHALIN	October	182.72	6	386.513	Almonds
PENDIMETHALIN	October	40	2	75.7572	Apricots
PENDIMETHALIN	October	24	2	45.4544	Cherrys
PENDIMETHALIN	October	170	4	407.195	Walnuts
PENDIMETHALIN	November	47.22	4	89.4314	Cherrys
PENDIMETHALIN	November	30	2	75.7572	Almonds
PENDIMETHALIN	November	55	4	137.348	Walnuts
PENDIMETHALIN	November	126	2	142.045	Beans
PENDIMETHALIN	November	556	10	522.724	Fallow
PENDIMETHALIN	December	300	4	284.09	Fallow
RIMSULFURON	February	120	2	7.5	Almonds
SAFLUFENACIL	November	18	2	0.784	Almonds
SETHOXYDIM	November	32	2	8.4116	Almonds
SETHOXYDIM	November	16	2	4.2058	Cherrys
SIMAZINE	October	125.6	10	251.177	Walnuts
SIMAZINE	November	242	4	224.808	Almonds
SIMAZINE	December	217	4	215.896	Almonds

Monitoring Site **Orestimba Creek at River R**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	January	216	6	5.451	Alfalfa
(S)-CYPERMETHRIN	February	220	2	5.4398	Alfalfa
2,4-D, DIMETHYLAMINE SALT	January	162	6	176.61	Almonds
2,4-D, DIMETHYLAMINE SALT	October	120	1	135.034	Fallow

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

2,4-D, DIMETHYLAMINE SALT	November	210	2	114.513	Almonds
2,4-D, DIMETHYLAMINE SALT	November	40	2	65.411	Walnuts
2,4-D, DIMETHYLAMINE SALT	December	25	1	40.8818	Walnuts
2,4-D, DIMETHYLAMINE SALT	December	249	5	135.706	Almonds
BETA-CYFLUTHRIN	October	150	2	0.4286	Broccoli
BIFENTHRIN	September	110	2	10.9016	Beans
BIFENTHRIN	September	50	1	3.1247	Tomatos
BIFENTHRIN	September	240	4	17.5092	Melons
CARFENTRAZONE-ETHYL	September	75	3	2.196	Walnuts
CARFENTRAZONE-ETHYL	October	90	2	1.2931	Walnuts
CARFENTRAZONE-ETHYL	November	47.22	4	0.6912	Cherrys
CHLORPYRIFOS	January	216	6	54.5082	Alfalfa
CHLORPYRIFOS	February	220	2	54.398	Alfalfa
CHLORPYRIFOS	September	75	1	232.308	Walnuts
COPPER SULFATE (BASIC)	January	30	2	127.98	Cherrys
DIMETHOATE	January	110	1	54.8062	Alfalfa
DIMETHOATE	February	1018	20	472.335	Alfalfa
DIMETHOATE	September	74	4	36.8698	Beans
DIMETHOATE	September	90	1	27.8222	Tomatos
DIMETHOATE	September	100	2	49.3708	Broccoli
DIMETHOATE	September	120	1	59.7886	Alfalfa
DIURON	February	24.26	4	38.5882	Walnuts
DIURON	February	54	2	11.9952	Alfalfa
DIURON	October	125.6	10	251.369	Walnuts
DIURON	December	87	1	130.588	Alfalfa
ESFENVALERATE	September	150	2	6.104	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	162	6	243.041	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	200	2	52.0088	Nursery
GLYPHOSATE, ISOPROPYLAMINE SALT	February	92.26	7	121.65	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	February	1026.43	16	1123.68	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	September	30	2	30.0358	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	September	745	10	1377.85	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	September	227	10	339.408	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	September	240	2	960.164	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	24	2	24.004	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	October	1251	13	4987.89	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	October	40	2	40.0068	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	October	170	4	246.861	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	October	520.72	15	832.222	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	310	10	621.146	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	November	63.22	6	102.848	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	November	175.01	10	307.639	Walnuts

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

GLYPHOSATE, ISOPROPYLAMINE SALT	December	249	5	498.085	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	25	1	80.0136	Walnuts
GLYPHOSATE, POTASSIUM SALT	February	229.6	14	301.323	Walnuts
GLYPHOSATE, POTASSIUM SALT	September	80	2	137.918	Walnuts
GLYPHOSATE, POTASSIUM SALT	October	90	2	186.134	Walnuts
GLYPHOSATE, POTASSIUM SALT	November	77.5	2	106.859	Almonds
GLYPHOSATE, POTASSIUM SALT	November	12.72	1	21.9565	Walnuts
HEXAZINONE	February	54	2	13.742	Alfalfa
HEXAZINONE	December	87	1	44.3409	Alfalfa
ISOXABEN	February	88.13	3	66.0975	Walnuts
ISOXABEN	February	120	4	90	Almonds
LAMBDA-CYHALOTHRIN	February	719	14	21.7264	Alfalfa
LAMBDA-CYHALOTHRIN	September	30	1	0.9437	Corn
LAMBDA-CYHALOTHRIN	September	120	1	2.9928	Alfalfa
LAMBDA-CYHALOTHRIN	September	184	6	4.958	Beans
LAMBDA-CYHALOTHRIN	September	371.99	9	14.4942	Walnuts
LAMBDA-CYHALOTHRIN	October	150	2	4.4622	Broccoli
METRIBUZIN	November	939	8	176.063	Fallow
NALED	September	48	1	48.3407	Beans
NORFLURAZON	January	86	2	22.3066	Walnuts
NORFLURAZON	February	195	4	76.635	Almonds
NORFLURAZON	September	400	2	235.8	Almonds
NORFLURAZON	October	140	4	82.53	Almonds
ORYZALIN	February	120	2	249.613	Almonds
ORYZALIN	September	160	2	582.429	Walnuts
OXAMYL	September	74	2	36.8372	Tomatos
OXYFLUORFEN	January	86	2	43.1412	Walnuts
OXYFLUORFEN	January	150	2	19.0414	Broccoli
OXYFLUORFEN	January	162	6	162.532	Almonds
OXYFLUORFEN	February	363.86	21	105.747	Walnuts
OXYFLUORFEN	February	446.43	10	134.245	Almonds
OXYFLUORFEN	September	317	6	63.4755	Almonds
OXYFLUORFEN	September	150	2	28.5976	Fallow
OXYFLUORFEN	September	281	11	50.8965	Walnuts
OXYFLUORFEN	October	762.72	19	344.862	Almonds
OXYFLUORFEN	October	40	2	10.0328	Apricots
OXYFLUORFEN	October	24	2	6.0198	Cherrys
OXYFLUORFEN	October	170	4	65.2134	Walnuts
OXYFLUORFEN	November	1495	18	374.948	Fallow
OXYFLUORFEN	November	63.22	6	75.944	Cherrys
OXYFLUORFEN	November	292	8	261.246	Almonds
OXYFLUORFEN	November	126	2	37.603	Beans

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

OXYFLUORFEN	November	142.73	9	107.466	Walnuts
OXYFLUORFEN	December	25	1	37.4862	Walnuts
OXYFLUORFEN	December	520	7	133.454	Fallow
OXYFLUORFEN	December	249	5	249.818	Almonds
PARAQUAT DICHLORIDE	February	445	8	302.144	Alfalfa
PARAQUAT DICHLORIDE	February	88.13	3	70.2243	Walnuts
PARAQUAT DICHLORIDE	February	240	8	166.005	Almonds
PARAQUAT DICHLORIDE	September	30	2	39.1856	Cherrys
PARAQUAT DICHLORIDE	September	198	7	204.024	Almonds
PARAQUAT DICHLORIDE	September	604	6	477.714	Walnuts
PARAQUAT DICHLORIDE	October	88	3	96.2186	Almonds
PENDIMETHALIN	January	86	2	162.878	Walnuts
PENDIMETHALIN	January	110	1	104.166	Alfalfa
PENDIMETHALIN	February	812.43	15	1096.46	Almonds
PENDIMETHALIN	February	661	14	1135.87	Alfalfa
PENDIMETHALIN	February	46.13	3	102.765	Walnuts
PENDIMETHALIN	September	610	5	1155.3	Almonds
PENDIMETHALIN	October	40	2	75.7572	Apricots
PENDIMETHALIN	October	24	2	45.4544	Cherrys
PENDIMETHALIN	October	170	4	407.195	Walnuts
PENDIMETHALIN	October	200.72	7	420.604	Almonds
PENDIMETHALIN	November	556	10	522.724	Fallow
PENDIMETHALIN	November	130.01	8	350.443	Walnuts
PENDIMETHALIN	November	126	2	142.045	Beans
PENDIMETHALIN	November	30	2	75.7572	Almonds
PENDIMETHALIN	November	47.22	4	89.4314	Cherrys
PENDIMETHALIN	December	520	7	492.422	Fallow
PENDIMETHALIN	December	25	1	75.7572	Walnuts
RIMSULFURON	February	120	2	7.5	Almonds
SAFLUFENACIL	September	26	1	1.1375	Walnuts
SAFLUFENACIL	November	18	2	0.784	Almonds
SETHOXYDIM	November	16	2	4.2058	Cherrys
SETHOXYDIM	November	32	2	8.4116	Almonds
SIMAZINE	February	6.95	1	6.9516	Almonds
SIMAZINE	October	125.6	10	251.177	Walnuts
SIMAZINE	November	242	4	224.808	Almonds
SIMAZINE	December	249	5	247.727	Almonds

Monitoring Site **Ramona Lake near Fig Aven**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
(S)-CYPERMETHRIN	February	278	6	13.7986	Alfalfa

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

2,4-D, DIMETHYLAMINE SALT	January	56.72	6	76.6616	Almonds
BIFENTHRIN	September	122	2	12.2184	Melons
BIFENTHRIN	September	40	2	3.9642	Corn
BIFENTHRIN	October	15	1	1.5023	Melons
BROMOXYNIL HEPTANOATE	January	74	2	15.9118	Alfalfa
BROMOXYNIL HEPTANOATE	December	140	2	37.1862	Alfalfa
BROMOXYNIL OCTANOATE	January	58	3	20.5786	Oats
BROMOXYNIL OCTANOATE	January	142	7	50.3253	Wheat
BROMOXYNIL OCTANOATE	January	74	2	16.501	Alfalfa
BROMOXYNIL OCTANOATE	December	140	2	38.5634	Alfalfa
CARFENTRAZONE-ETHYL	February	126	2	1.6602	Almonds
CARFENTRAZONE-ETHYL	February	110	5	1.6041	Oats
CARFENTRAZONE-ETHYL	December	40	2	0.5996	Oats
CHLORPYRIFOS	January	17	1	23.9564	Almonds
CHLORPYRIFOS	February	159	7	101.452	Alfalfa
CLETHODIM	October	99	2	26.3595	Alfalfa
DIMETHOATE	January	395	13	196.744	Alfalfa
DIMETHOATE	February	606	14	288.745	Alfalfa
DIURON	January	16	2	19.992	Alfalfa
ESFENVALERATE	February	10	2	0.4556	Apricots
ESFENVALERATE	September	116	4	3.9564	Tomatos
GLYPHOSATE, ISOPROPYLAMINE SALT	January	56.72	6	105.45	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	January	134	4	134.023	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	February	180	4	190.032	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	260	5	260.044	Alfalfa
GLYPHOSATE, ISOPROPYLAMINE SALT	October	100	2	100.017	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	1	1	3.1255	Walnuts
GLYPHOSATE, ISOPROPYLAMINE SALT	November	6	1	12.002	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	November	25.1	2	30.2051	Almonds
GLYPHOSATE, POTASSIUM SALT	January	104	2	143.435	Alfalfa
GLYPHOSATE, POTASSIUM SALT	February	43	1	88.9571	Tomatos
GLYPHOSATE, POTASSIUM SALT	February	43	1	88.9847	NA
GLYPHOSATE, POTASSIUM SALT	September	4	1	13.7918	Almonds
HEXAZINONE	January	114	5	82.9609	Alfalfa
HEXAZINONE	February	307	6	156.761	Alfalfa
IMAZAMOX, AMMONIUM SALT	January	74	2	2.4978	Alfalfa
IMAZAMOX, AMMONIUM SALT	October	239	4	12.062	Alfalfa
IMAZETHAPYR, AMMONIUM SALT	January	74	2	4.9502	Alfalfa
ISOXABEN	February	126	2	42.525	Almonds
LAMBDA-CYHALOTHRIN	January	251	4	7.4422	Alfalfa
LAMBDA-CYHALOTHRIN	February	1140	26	65.6746	Alfalfa
MCPA, DIMETHYLAMINE SALT	January	58	3	32.7738	Oats

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

MCPA, DIMETHYLAMINE SALT	January	636	18	325.946	Wheat
MCPA, DIMETHYLAMINE SALT	February	110	5	64.0068	Oats
MCPA, DIMETHYLAMINE SALT	February	25	1	14.104	Wheat
MCPA, DIMETHYLAMINE SALT	December	218	10	120.660	Oats
MCPA, DIMETHYLAMINE SALT	December	38	2	10.5422	Wheat
METHOMYL	January	187	3	84.15	Alfalfa
METHOMYL	February	1080	22	491.4	Alfalfa
NORFLURAZON	February	100	2	39.3	Almonds
OXYFLUORFEN	February	12.18	2	9.15	Walnuts
OXYFLUORFEN	February	43	1	10.7953	NA
OXYFLUORFEN	February	100	2	50.777	Almonds
OXYFLUORFEN	October	1	1	0.5016	Walnuts
OXYFLUORFEN	October	100	2	50.1642	Almonds
OXYFLUORFEN	November	25.1	2	15.2121	Almonds
OXYFLUORFEN	November	6	1	6.0932	Cherrys
OXYFLUORFEN	December	43	1	10.7953	Fallow
PARAQUAT DICHLORIDE	January	255	10	21.0993	Alfalfa
PARAQUAT DICHLORIDE	February	12.18	2	2.0122	Walnuts
PARAQUAT DICHLORIDE	February	29	1	18.6269	Alfalfa
PARAQUAT DICHLORIDE	February	266	6	175.390	Almonds
PARAQUAT DICHLORIDE	December	144	2	99.6694	Alfalfa
PENDIMETHALIN	January	255	10	241.476	Alfalfa
PENDIMETHALIN	February	12.18	2	34.5452	Walnuts
PENDIMETHALIN	February	366	8	669.315	Almonds
PENDIMETHALIN	February	386	9	1265.15	Alfalfa
PENDIMETHALIN	October	239	4	226.325	Alfalfa
PENDIMETHALIN	November	5.1	1	9.659	Almonds
PENDIMETHALIN	November	6	1	11.3636	Cherrys
PENDIMETHALIN	December	144	2	272.726	Alfalfa
RIMSULFURON	January	56.72	6	2.1976	Almonds

Monitoring Site **Westley Wasteway near Cox**

Pesticide AI	Month	Acres Treated*	No of Applications *	AI Use Qty** (lbs)	Commodity
2,4-D, DIMETHYLAMINE SALT	February	398	7	187.081	Almonds
2,4-D, DIMETHYLAMINE SALT	February	250	4	114.283	Apricots
2,4-D, DIMETHYLAMINE SALT	October	110	2	123.781	Fallow
BIFENTHRIN	September	150	2	8.9134	Melons
BROMOXYNIL HEPTANOATE	February	90	2	15.485	Alfalfa
BROMOXYNIL OCTANOATE	February	90	2	16.0586	Alfalfa
CHLORPYRIFOS	February	172	2	80.7942	Alfalfa
CHLORPYRIFOS	December	1080	4	2181.67	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

CLETHODIM	September	172	2	36.6688	Alfalfa
CLETHODIM	October	10	1	1.2218	Right of Way
COPPER SULFATE (PENTAHYDRATE)	January	136	2	1346.4	Apricots
DIMETHOATE	February	165	4	81.6263	Alfalfa
ESFENVALERATE	January	160	4	9.8262	Apricots
ESFENVALERATE	February	216	8	8.7848	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	January	1080	4	2697.69	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	448	8	257.749	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	February	250	4	144.723	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	September	23	2	32.7198	Apricots
GLYPHOSATE, ISOPROPYLAMINE SALT	September	124.5	2	227.869	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	100	2	100.017	Cherrys
GLYPHOSATE, ISOPROPYLAMINE SALT	October	608	7	531.341	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	October	110	2	318.391	Fallow
GLYPHOSATE, ISOPROPYLAMINE SALT	November	260.5	5	478.844	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	87.95	1	131.812	Almonds
GLYPHOSATE, ISOPROPYLAMINE SALT	December	50	1	65.3176	Oats
GLYPHOSATE, POTASSIUM SALT	October	10	1	41.3754	Right of Way
HEXAZINONE	December	170	2	129.786	Alfalfa
LAMBDA-CYHALOTHRIN	February	162	3	4.1151	Peaches
LAMBDA-CYHALOTHRIN	February	172	2	5.4106	Alfalfa
LAMBDA-CYHALOTHRIN	February	1136	16	27.1638	Apricots
LAMBDA-CYHALOTHRIN	September	425	6	12.2194	Tomatos
MCPA, DIMETHYLAMINE SALT	January	18	2	5.063	Wheat
MCPA, DIMETHYLAMINE SALT	January	120	1	33.9039	Oats
METHOMYL	September	57	1	51.3	Tomatos
METRIBUZIN	November	55	1	10.3125	Alfalfa
METRIBUZIN	November	343	4	64.3125	Fallow
METRIBUZIN	December	150	2	56.25	Fallow
ORYZALIN	February	102	2	212.171	Almonds
ORYZALIN	December	87.95	1	137.209	Almonds
OXYFLUORFEN	January	1080	4	1583.22	Almonds
OXYFLUORFEN	February	179.52	2	45.5774	Almonds
OXYFLUORFEN	September	3	1	1.8812	Apricots
OXYFLUORFEN	September	96.5	1	72.6177	Almonds
OXYFLUORFEN	October	608	7	114.018	Almonds
OXYFLUORFEN	October	100	2	12.541	Cherrys
OXYFLUORFEN	November	343	4	86.0416	Fallow
OXYFLUORFEN	November	55	1	13.8052	Alfalfa
OXYFLUORFEN	November	260.5	5	203.627	Almonds
OXYFLUORFEN	December	87.95	1	128.93	Almonds
OXYFLUORFEN	December	150	2	37.6232	Fallow

***Includes duplicate and incomplete data**
**** Not available in all counties.**

Pesticide Use Summary

9/1/2013 through 3/1/2014

PARAQUAT DICHLORIDE	February	247.02	5	309.684	Almonds
PENDIMETHALIN	February	179.52	2	339.998	Almonds
PENDIMETHALIN	September	96.5	1	365.528	Almonds
PENDIMETHALIN	October	110	2	416.665	Almonds
PENDIMETHALIN	November	197.5	3	748.102	Almonds
PENDIMETHALIN	December	170	2	321.968	Alfalfa
PHENMEDIPHAM	January	90	2	44.2088	Spinach
RIMSULFURON	February	102	2	6.375	Almonds
RIMSULFURON	October	498	5	15.5625	Almonds
SAFLUFENACIL	February	50	1	0.8269	Almonds
SIMAZINE	February	67.5	3	57.9471	Almonds

***Includes duplicate and incomplete data**
**** Not available in all counties.**

District Outreach Flyers

Application Deadlines

FEBRUARY 28, 2014

AUGUST 8, 2014

Conservation Program

Step-by-Step

Fill out this application or go on-line. Submit a project design and cost estimate by deadline

All projects will be reviewed by the Water Conservation Committee for preliminary approval

Once notified of approval, submit construction schedule to CCID

Any changes to submitted design MUST be provided to CCID *prior* to construction

Upon completion of engineering evaluation, notice to construct will be issued

Periodic inspections throughout construction will be done by CCID

After final inspection, bills are submitted

Completed projects are presented to the Board of Directors and funds are disbursed to Landowner

For Questions or More Information
Please contact:
Tracey Rosin
Conservation Coordinator
Phone: (209) 826-1421
Cell: (209) 777-8060
Fax: (209) 826-3184
trosin@ccidwater.org

CENTRAL CALIFORNIA IRRIGATION DISTRICT

2014 On-Farm Water Conservation Program

Landowner:_____

Tenant:_____

Project Type:_____

Office/Home Phone:_____ **Cell Phone:**_____

Email address:_____

Water Conservation Program Guidelines are available on-line at www.ccidwater.org. Funding levels may be pro-rated based on the number of applications received.

TWO DEADLINES: February 28th or August 8th

GRANT PROGRAM

50% cost-share

for all Concrete Lining or Pipelining up to **$400/acre** benefited

25% cost-share

for irrigation enhancements up to **$400/acre** benefited such as:

Tailwater Return Systems, Micro-Sprinklers, Drip Systems, Dairy related projects, other irrigation efficiency improvements

LOAN PROGRAM

3% interest loans up to $1000/acre benefited for farmer's portion after cost-share grant.

One annual payment per year

5 year term for on-farm systems 10 year term for community ditches

Contact your local FSA office for additional funding options

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CONSERVATION PLAN

CCID Launches New Water Conservation Plan

■ Board approves 10-year plan to improve conservation and service to North and South Divisions.

The CCID Board of Directors has adopted a new 10-year Water Conservation Plan that will guide implementation of state-of-the-art conservation practices and facilities in both the North and South Divisions.

The Plan, which builds on the successfully completed previous 10-year plan, was developed over an 18-month period with input from Cal Poly's Irrigation Research and Training Center in San Luis Obispo.

"This plan identifies specific project areas in both the North and South Divisions, and lays out step-wise how the District will address those areas with an eye on completing all projects by 2022," said CCID General Manager Chris White.

Those projects include leveraging $1 million in Bay-Delta Initiative grant funds through the Bureau of Reclamation to construct regulating reservoirs in the South Division that will bring water savings and delivery flexibility to the area. In the North Division, matching grant funds will help finance upgrades to the Amaral Ditch system to eliminate or reduce operational spills and improve conservation and delivery to customers on that ditch.

The plan handles the North and South Divisions differently, noting the distinction that many of the facilities targeted for improvement in the South are District-owned, while many of the laterals off the Main and Outside Canals in the North are privately held community ditches.

In the South Division, regulating reservoirs on the Poso Canal and East Ditch are the first of nearly a dozen In-District Conservation projects as part of the 10-year modernization and conservation plan. Construction of those reservoirs is expected to begin this spring. These regulating reservoirs and installation of automated or long-crested weirs will stabilize the canal pool and accommodate increased adoption of drip and other on-farm irrigation efficiencies. Additional projects in the South Division focus on on-farm conservation projects such as micro-irrigation, tail-water return systems, concrete linings as well as In-District conservation projects that maximize tail-water return back into the canal.

In the North, the District has received matching dollars to help landowners upgrade the Amaral Ditch facility to improve service to customers on that ditch and eliminate or reduce operational spills.

Continued on next page

Got Old Photos?

CCID is working with an historian to develop a published account of the District's origin and development. The District is looking for historical photos for use in the publication. Please share your photos in developing our history. Photos can be brought to the Main Office where they will be scanned and returned immediately or they can be mailed to the attention of Tracey Rosin at P. O. Box 1231, Los Banos, 93635. All mailed photos will be cared for and returned by mail.

2 VIPS Tour CCID

3 Conservation Spotlight

State and Federal VIPS Tour CCID

■ Resource agencies and legislative representatives learn of innovation and conservation within the District.

CCID and the Exchange Contractors have hosted a number of VIP tours of the District and its facilities over the last few months to raise awareness of the improvements, conservation efforts and issues impacting landowners within the District.

"CCID has been inviting legislative, water agency and Bureau representatives, and local water district officials, in an aggressive effort to showcase the good things we are doing," said CCID General Manager Chris White. "At the same time we want to also raise awareness about subsidence, River Restoration and other issues that potentially impact effective water delivery to our consumers and neighbors."

CCID General Manager Chris White leads a subsidence tour in March for representatives from the offices of Sen. Dianne Feinstein and Reps. Jim Costa and David Valadao.

Officials from the State Water Board, Regional Water Quality Control Board, and State Assembly have visited in recent months, in addition to envoys from the offices of U.S. Senators and federal agencies.

CCID also hosted technical staff of the Turlock Irrigation District to share state-of-the-art improvements within the District related to modernization and controls in a reciprocal exchange of information.

Among other facilities, attendees toured: Los Banos Creek Detention Dam, on-farm and in-district conservation projects; regulating reservoirs; large groundwater recharge projects; and canal lining and drainage projects.

"The purpose of these tours is, number one to show that CCID and other members of the Exchange Contractors are doing very positive things in terms of water conservation and water resource planning," he said. "It is important we portray a modern and accurate image of who the District is and what we are trying to accomplish.

"At the same time, we feel we have been successful in fashioning solutions to some really tough problems, including seepage and other consequences of San Joaquin River Restoration, drainage and subsidence, and we want to illuminate for state and federal representatives the benefits of letting local stakeholders fashion effective solutions to these and other challenges rather than a top-down, one-size-fits-all mandate."

New Water Conservation Plan

Continued from previous page

The current Amaral System in the North Division is comprised of a buried pipeline conveying water to an unlined ditch that ultimately discharges into the San Joaquin River. Current deliveries and tail-water discharges into the Amaral System create wide fluctuations in flow rates and uncontrolled discharges into the San Joaquin River. Amaral System improvements include replacing a mile of unlined ditch downstream from Kilburn Road with concrete lined ditch and pipeline and building an adjacent quarter-mile long, 60 to 80-foot-wide linear reservoir with corresponding pump stations to increase storage volume and improve management. The Conservation Project will capture excess flows before they are discharged into the River and pump them into the regulating reservoir before returning the runoff to the irrigation system.

"We are going to have CCID Water Conservation Program grant funds for landowners of up to 25 percent, plus an additional 50 percent in outside matching funds, which means the cost to landowners could be 25 cents on the dollar," White said. "If you do the math it's a really good deal for landowners and it conserves water and provides better service on the ditch they own."

The District recently completed components of the Water Conservation Plan developed in 1992 that included modernization and automation of the Main Canal and Outside Canal; an inter-connection at O'Banion bypass; and a program to regulate the reservoir in the Ingomar Area.

Regulating reservoirs scheduled to begin construction this spring will help bring water savings and delivery flexibility to the District's South Division.

Redfern Ranches Improves Tomato Yield and Quality While Saving Water With Drip

■ GRANTS FROM CCID AND BAY-DELTA INITIATIVE COVER MOST COSTS FOR SYSTEM INSTALLATION.

Redfern Ranches is taking advantage of leveraged Bay-Delta Initiative and US Bureau of Reclamation grant funds through CCID's partnership with NRCS to cover most of the installation costs for a newly installed 217-acre drip installation on processing tomatoes.

The grant funds, which covered 70 percent of the cost of the project (excluding the drip tape) make the drip system an excellent investment for the farm, not only saving an estimated 108 acre-feet of water per year, but providing significant yield and quality benefits compared to furrow irrigation.

JOE MUNOZ JR. INJECTS ALGAECIDES TO KEEP LINES AND EMITTERS FREE OF DEBRIS DIRECTLY THROUGH THE AUTOMATED DRIP SYSTEM.

Steve Fausone, who manages the multi-generation family farming operation, said nearly 25 percent of Redfern's acreage is currently under drip irrigation, and he expects that proportion to increase in coming years.

Redfern owns 13,300 acres in the Dos Palos area, including 8,800 acres in CCID, on crops including alfalfa, barley, wheat, cotton, garlic and permanent crops. Tomatoes make up about 10 percent of the total acreage and virtually all of that 1,300 tomato acres is grown on drip irrigation. An additional drip installation is planned this year on another 200 tomato acres, bringing the total to about 1,500 acres.

FAUSONE AND MUNOZ, WHO MANAGES IRRIGATION SYSTEMS AT REDFERN, SAID DRIP ALLOWS THEM TO FINE-TUNE WATER AND NUTRIENT APPLICATIONS TO OPTIMIZE WATER USE, YIELD AND QUALITY.

Redfern Ranches, which operates in two Exchange Contract and four federal districts, started growing tomatoes in 2000 and made its first conversion to drip in 2008, said Joe Munoz Jr., who manages irrigation systems at Redfern. Initially, he said, the abundant water within the Exchange Contractors moderated conversions to drip irrigation on tomatoes, but today, with undeniable yield and quality benefits and a number of incentive programs in place, CCID growers are moving rapidly toward producing tomatoes under drip.

"Because of the water situation here people at first weren't pushed as hard to go to drip, but the yield and water conservation benefits over time have more than justified the cost," Munoz said.

Over the last five years Redfern has converted an annual average of 200 acres of furrow irrigated field crop ground to tomatoes on drip. Yields increased consistently an average of 30 to 40 percent compared to furrow irrigation, he said.

STEVE FAUSONE OF REDFERN RANCHES CHECKS OVER A PROCESSING TOMATO FIELD, NEWLY PLANTED TO DRIP WITH HELP FROM CCID'S WATER CONSERVATION PROGRAM, JUST PRIOR TO HARVEST.

"We are actually taking ground that wouldn't traditionally be known as good tomato ground and converting it with drip to good quality, high-yielding tomato crops," Munoz said.

Redfern has participated in CCID's Water Conservation Program for a number of years, utilizing matching grant funds to finance 25 percent of the cost (up to $400 per acre) for on-farm water conservation projects, including micro-irrigation and tail-water return systems. This year funding for the project installation on the River Ranch, which runs along the San Joaquin River in the District's South Division near Dos Palos, was largely funded by additional funds the District received from the Bureau and NRCS. The $750 per acre grant covered all the costs except for the tape.

Tomatoes at Redfern are grown on 80-inch beds, with a single line of 15-mil tape buried 12 to 14 inches below the surface in the center of double rows of tomatoes on each bed. Inline .25 gallon-per-hour emitters run along the tape in 1-foot spacing. The drip system is filtered with an 8-tank sand gravel filtration system that runs in two sets to irrigate the 200-acre field.

For next year, Redfern is considering a plan to convert 1,000 acres in the Camp 13 area to drip irrigation with help from the Water Conservation Program and outside funds as part of a larger project to address subsurface drainage problems in the region. The land is currently rotated to alfalfa, wheat and cotton under furrow irrigation.

"We are doing soil samples to determine what crops to grow, whether it will be tomatoes, grapes, almonds or alfalfa, to see if we can make it work on drip," Fausone said. "It looks like that will be viable, although rodent control is going to be an issue."

FAUSONE SAID DRIP NOT ONLY SAVES WATER BUT ALSO IMPROVES YIELD AND QUALITY IN THE FARM'S PROCESSING TOMATOES.

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A look back...

50 Years Ago – Fall 1963

A Federal court judge in Fresno dismissed the first legal attempt by the Four Entities to compel the federal government to provide a drainage system for the lands to be served by the new San Luis Unit of the Central Valley Project. The CCID Board of Directors decided not to appeal "inasmuch as the Bureau of Reclamation had indicated that definite plans for the drain would be forthcoming around January 1, 1964."

25 Years Ago – Fall 1988

The Dos Palos City Council voted to construct a pipeline directly from the California Aqueduct to the City's water treatment plant. With the completion of the pipeline in 1989, the City would no longer divert its water from the CCID canal system.

10 Years Ago – Fall 2003

CCID's management and Board of Directors devoted much time and effort in deciding how best to comply with new rules adopted by the Regional Water Quality Control Board for the conditional ag discharge waiver program. It was ultimately agreed that the District would assist its landowners and consumers in joining in the newly formed West San Joaquin River Watershed Coalition, which would perform the required monitoring and reporting services.

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2013 RECAP

Year in Review and Looking Ahead

SUBSIDENCE

Subsidence near the CCID service area in Madera and Merced counties continued to take prominence in 2013 as the District partnered with San Luis Canal Co., landowners within the affected areas, the Madera and Merced County's Boards of Supervisors, the United States Bureau of Reclamation, the California Department of Water Resources, along with other interested parties, to develop promising short- and long-term solutions to the problem.

The solutions envisioned convert the Red Top area into a shallow groundwater bank for use on the overlying farming using flood flows from the San Joaquin, Fresno, Chowchilla and Kings River systems when they are available, thus allowing the deep wells that are causing subsidence to be abandoned. The next steps in the process are to develop the ability to deliver outside purchased water into the subsidence area, help organize landowners into a district, develop recharge facilities, re-drill shallow wells, and develop a small long-term developed water supply to supplement the new water bank within the Red Top Area.

IRRIGATED LANDS

The Regional Water Quality Control Board (RWQCB) was busy drafting proposed Waste Discharge Requirements for the Western San Joaquin River Watershed as part of the new Irrigated Lands Program (see related story in this issue.)

The expanded Irrigated Lands Program will include increased monitoring of groundwater, the development and submittal of nitrogen management plans and farm evaluations for each farm. The RWQCB is expected to adopt the new Irrigated Lands Program for the westside at a public meeting in Los Banos on January 9, 2014.

CCID landowners in late June approved a Proposition 218 assessment to landowners within the Westside Watershed Coalition to cover the increase in anticipated costs for participation in the Irrigated Lands Regulatory Program. The Westside Coalition covers more than 136,750 acres within CCID.

CONSERVATION

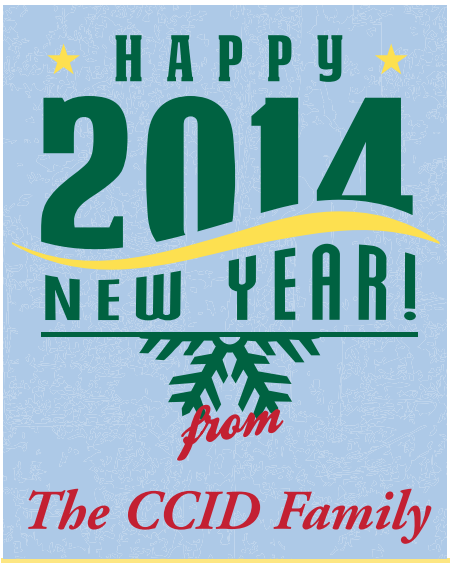
WATER CONSERVATION

Central California Irrigation District in 2013 began implementation of the new 10-year Water Conservation Plan, which envisions significant on-farm financial assistance, community ditch improvements, regional regulating reservoirs, lining of canals, and a continuation of District facility modernization and automation.

The Plan, which builds on the successfully completed previous 10-year plan, will guide implementation of state-of-the-art conservation practices and facilities in both the North and South Divisions.

Last year, the US Bureau of Reclamation (USBR) partnered with the local Natural Resource Conservation Service (NRCS) through the Bay-Delta Initiative to provide funding for on-farm improvement practices in the service areas of 2 new reservoir sites

Continued on next page



General Manager Chris White, from left, meets with Carlos Suarez, State Conservationist, NRCS California, Jennifer Foster, Resource Conservationist, NRCS Merced, NRCS Chief Jason Weller, and Anita Brown, NRCS Director of Public Affairs to discuss the many projects in which CCID could potentially partner with NRCS and Bureau of Reclamation to bring conservation projects to the CCID service area in 2014.

2 Conservation Spotlight

3 Historical Account of CCID Irrigated Lands for West SJR

2013 Demonstrates Continued Grower Commitment

A record number of on-farm conservation projects have been granted preliminary approval within the District as our growers move to accomplish their improvement practices. Among the record 82 on-farm projects approved in October, 2013 are 65 drip tape and micro-sprinkler installations; six concrete ditch improvements; six pipeline improvements; two tailwater return systems; two community ditches and a drain interceptor line. The total cost of all on-farm improvement projects exceeds $11.3 million.

An award of a $300,000 grant under the Bureau's Bay Delta Initiative Program for implementation of a system spill elimination project on the Amaral Ditch last May has provided for a partnering with NRCS for an additional $300,000 for on-farm projects through the local Stanislaus County office. CCID Conservation Coordinator Tracey Rosin is currently working with NRCS in Stanislaus County to develop a program description and ranking criteria and establish a deadline for applicants in the region interested in participating in on-farm conservation project installations.

CONCRETE DITCH IMPROVEMENTS.

DRIP TAPE AND MICRO-SPRINKLER IRRIGATION SYSTEM INSTALLATIONS ACCOUNT FOR THE LION'S SHARE OF THE NEW CONSERVATION PROJECTS.

TAIL-WATER RETURN SYSTEMS IMPROVE APPLICATION EFFICIENCY WHILE ADDRESSING WATER QUALITY CONCERNS.

PIPELINE INSTALLATIONS.

GROWERS HAVE COME TOGETHER ON COMMUNITY DITCH PROJECTS.

Year in Review and Looking Ahead

Continued from previous page

in our South Division, allowing CCID growers to maximize their investment. The newly appointed NRCS chief and staff members recently toured the local area to see a number of projects first-hand.

In May, a $300,000 grant was awarded from the USBR's Bay Delta Initiative Program for implementation of a system spill elimination project on the Amaral Ditch. NRCS is in the process of developing an on-farm funding opportunity for CCID growers in partnership with this grant in an effort to address regional concerns that impact water quality.

OUTSIDE CANAL

The first Phase of the Outside Canal Subsidence Mitigation project nears completion with selection of engineering and design consulting firms to replace the Russell Avenue Bridge over the Outside Canal. The bridge has subsided over the years and as a result is a significant restriction to flows in the Outside Canal. Fresno County and Caltrans have agreed to partner with CCID to rebuild the bridge. The project is currently in the design phase and is scheduled for construction in 2015.

While CCID successfully managed these and other significant issues this year, most of these are ongoing and District staff will continue to both lead and follow on these issues in the coming year to serve the interests of its landowners.

Historical Account of CCID to be Published

CCID is working with a local historian to put together a comprehensive look at the history, and ultimately the future, of the Central California Irrigation District. This published work will provide a fascinating look into the foresight and determination that went into creating this unique irrigation district and its farming community, along with the characters and the vision that helped shape it.

The well-researched narrative begins with the construction and operation of the San Joaquin and Kings River Canal & Irrigation Company, and runs through the relationship with Miller & Lux, settlement of lands served by the company's various canals, the Central Valley Project and the Exchange Contract and through the formation of CCID. It ends with a present day look into the issues facing the CCID service area now and into the future.

The District continues to seek historical photos for use in the publication. If you are interested in sharing old photos contact the CCID main office.

THIS PHOTO SHOWS THE HELM HEADGATE RECONSTRUCTION IN FEBRUARY 1934.

THOMAS MOTT STANDS AT THE ORIGINAL WEIR IN 1938.

HORSES AID IN THE ORIGINAL CONSTRUCTION OF THE OUTSIDE CANAL IN 1897.

Irrigated Lands for West SJR Set for January Approval

The Westside San Joaquin River Water Quality Coalition has submitted a number of public comments seeking realistic implementation for proposed new Waste Discharge Requirements for the West San Joaquin Watershed under the revised Irrigated Lands Regulatory Program.

The expanded Irrigated Lands Program will include the regulation of discharges to groundwater, nitrogen management plans and farm evaluation plans for each farm. A public hearing in July in Los Banos drew comments from a number of landowners who petitioned the Water Board to craft realistic and reasonable regulations. The resulting draft, however, was similar in content to WDRs approved in Dec. 2012 for the East San Joaquin River Watershed.

The Westside WDRs are expected to be adopted at a public meeting in Los Banos January 9th, 2014.

CCID landowners in late June approved Proposition 218 to implement assessments to landowners within the Westside Watershed Coalition to cover the increase in anticipated costs for participation in the Irrigated Lands Regulatory Program. The Westside Coalition includes more than 136,750 acres within CCID.

Key components of the new requirements include new management, monitoring and reporting requirements for agricultural surface water and groundwater. All growers under a WDR will be required to complete farm evaluations, nitrogen management plans, and, depending on conditions, sediment and erosion control plans. Once the new groundwater monitoring requirements are added to the program, costs to run the program are expected to more than double.

Most of these requirements will be implemented beginning in 2015.

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A look back...

50 Years Ago – Winter 1963

Marking the end of CCID's first 10 years of operation, the Board commissioned a study of the District's past, present and future. The study concluded that there would be a consistent shortfall of water in the summer months, and the Board agreed to further explore its recommendations, which included drilling more wells; building off-stream, inter-canal reservoirs; lining canals where feasible; identifying additional sources of drain water of suitable quality; and continuing to provide loans for lining or pipelining of community laterals.

25 Years Ago – Winter 1988

In anticipation of a possible Critical Year water supply in 1989, the Board adopted a tiered pricing schedule for the first time, with Tier 1 water to cost $5.50 per a.f., and Tier 2 water to be sold at $15.00 per a.f. Although 1989 turned out to be a non-Critical Year, the tiered price levels were kept in place for the year.

10 Years Ago – Winter 2003

In its fourteenth year of operation, the District's low-interest water conservation loan program surpassed the $4,000,000 mark in loans issued to CCID landowners, facilitating annual water savings of at least 7,000 acre-feet on the nearly 300 on-farm projects that had been funded.

Apply Today!
Call Alejandro at SLCC to get qualified

Alejandro Paolini
Water Conservation Specialist
Office Phone: (209) 826-5112
(209) 387-4305
Cell: (209) 587-1241
Fax: (209) 387-4237
apaolini@slcc.net

2014 Water Conservation Program

Same Funding Levels

Easy to Apply, No Deadline

ON-FARM PROJECTS

GRANT

50% cost-share for on-farm irrigation enhancements and ditch improvements up to **$250/acre** maximum.

Drip Systems, Tailwater Return Systems, Micro-Sprinklers, Laser Leveling, Pipelines, Concrete Lined Ditches, Dairy related projects, other irrigation efficiency improvements

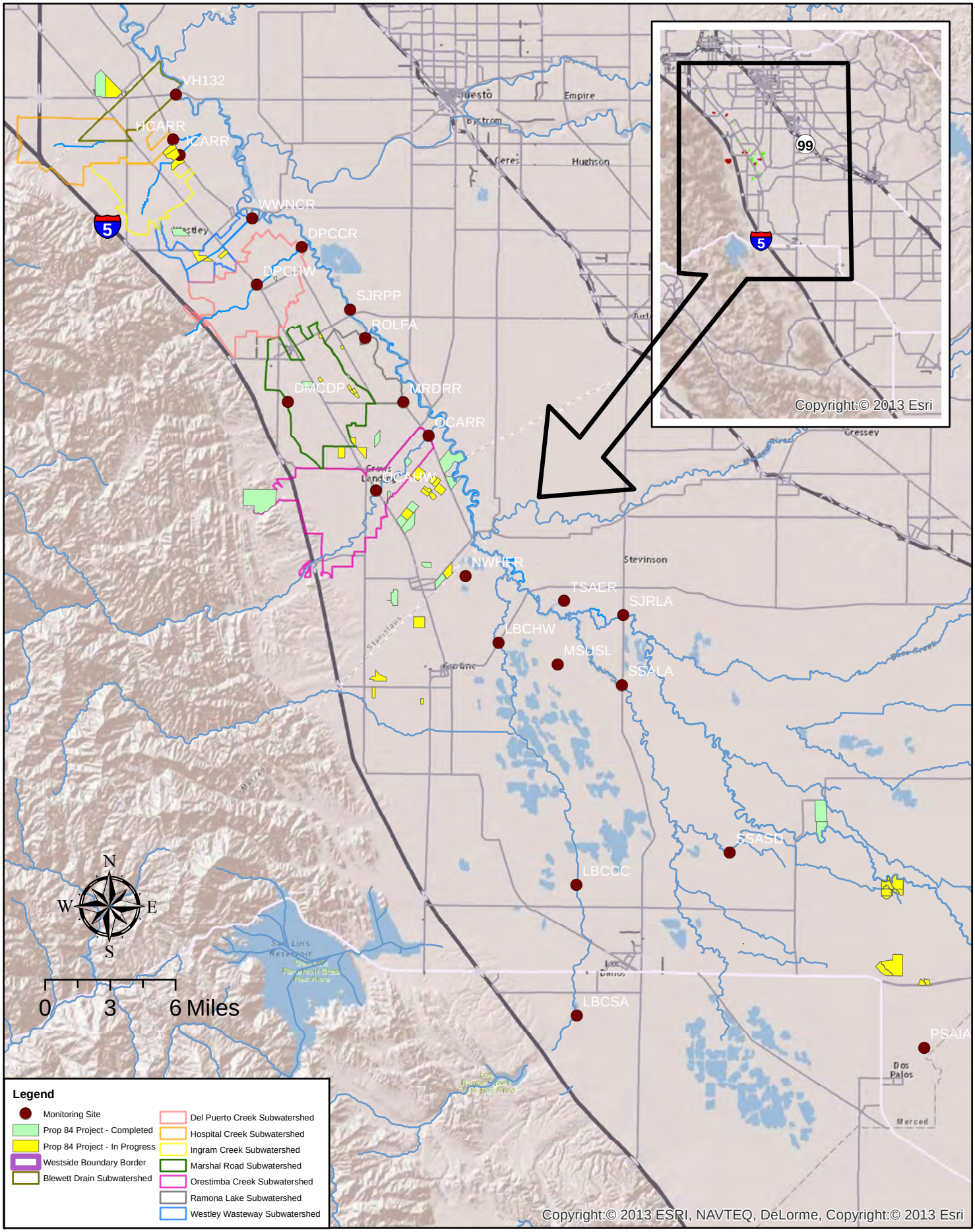
LOAN

3% interest loans up to **$250/acre** maximum for farmer's portion after grant cost-share. 5 year term. One annual payment

Maximum Canal Company participation:

$500/acre benefited combining grant and loan portions

Management Practice Maps



WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

Proposition 84 Projects as of June 2014

Summers Engineering, Inc.
Consulting Engineers
Hanford California

Path: G:\data\ARCVIEW\MAPS\Wside coalition\June 2014 SAMR Prop 84.mxd

Attachment 7
Special Project Monitoring and Constituents

TABLE 4a: Monitoring Site Tests March 2012-February 2014

Monitoring Site	Site Code	Season: Irrigation (Mar-Aug)*	Season: Non-Irrigation (Sep-Feb)*	Season: Rain Event (2x per year)	Non-Irrig Season Core	Irrig Season Core	Special Study Analytes - March 2012 through February 2014: Metals**	Ceriodaphnia Toxicity	Fathead Toxicity	Algae Toxicity	Sediment Toxicity	Pesticides: OP	Pesticides: OC	Pesticides: Group A	Pesticides: Carb	Pesticides: Herb
Discharge Sites																
Vernalis at Highway 132	VH132	Special	Core	Rain**	x			x			x	x	x	x		x
Poso Slough at Indiana Avenue	PSAIA	Special	Core	Rain**	x		x	x		x	x	x	x	x	x	x
Hospital Cr at River Road	HCARR	Special	-	Rain**			x	x		x	x	x			x	x
Ingram Cr at River Road	ICARR	Core + Special	Core	Rain**	x	x	x	x		x	x	x	x	x	x	x
Westley Wasteway near Cox Road	WWNCR	Core + Special	Core	Rain**	x	x	x	x		x	x	x	x	x		x
Del Puerto Cr near Cox Road	DPCCR	Core + Special	Core	Rain**	x	x		x			x	x	x	x	x	x
Del Puerto Cr at Hwy 33	DPCHW	Special	-	Rain**				x			x	x	x	x	x	x
Ramonal Lake near Fig Avenue	ROLFA	Core + Special	Core	Rain**	x	x		x			x	x	x	x		x
Marshall Road Drain near River Road	MRDRR	Core + Special	Core	Rain**	x	x		x				x	x	x		x
Orestimba Cr at River Road	OCARR	Core + Special	Core	Rain**	x	x	x	x		x	x	x	x	x	x	x
Orestimba Cr at Hwy 33	OCAHW	Special	-	Rain**			x	x		x	x	x	x	x	x	x
Newman Wasteway near Hills Ferry Road	NWHFR	Core + Special	Core	Rain**	x	x		x			x	x	x	x		x
San Joaquin River at Lander Avenue	SJRLA	Core + Special	Core + Special	Rain**	x	x		x				x				x
Mud Slough u/s San Luis Drain	MSUSL	Core + Special	Core + Special	Rain**	x	x		x				x	x	x	x	x
Salt Slough at Lander Avenue	SSALA	Core + Special	Core + Special	Rain**	x	x		x				x	x	x	x	x
Salt Slough at Sand Dam	SSASD	Special	-	Rain**				x			x	x			x	x
Los Banos Creek at Highway 140	LBCHW	Core + Special	Core + Special	Rain**	x	x	x	x		x		x				x
Los Banos Creek at China Camp Road	LBCCC	Core + Special	Core	Rain**	x	x	x	x	x	x	x	x				x
Turner Slough near Edminster Road	TSAER	Core + Special	Core	Rain**	x	x		x	x			x				x
~~Little Panoche Cr at Western Boundary~~	~~LPCWB~~	~~Assmt~~	~~Assmt~~	~~Rain**~~												
~~Little Panoche Cr at San Luis Canal~~	~~LPCSL~~	~~Assmt~~	~~Assmt~~	~~Rain**~~												
~~Russell Ave. Drain at San Luis Canal~~	~~RADSL~~	~~Assmt~~	~~Assmt~~	~~Rain**~~												
~~Los Banos Creek at Sunset Ave~~	~~LBCSA~~	~~Assmt~~	~~Assmt~~	~~Rain**~~												
Source Water Sites																
San Joaquin River at Sack Dam	SJRSD	Source	Source	Source	x	x						x				
Delta Mendota Canal at Del Puerto WD	DMCDP	Source	Source	Source	x	x						x				
San Joaquin River at PID Pumps	SJRPP	Source	Source	Source	x	x						x				

* Irrigation season will run from March through August. Non-irrigation season will run from September through February. The Westside Coalition, in colaboration with the Regional Water Quality Control Board, may shift the seasons up or back 1 month to ac

* Rain events only

** Special Site list. See Table 5

** During rain event sample collection, Discharge sites will be sampled for the constituents listed

TABLE 5: Chemical Analyses

	Material	Matrix	Ass'ment	Core	Rain Event	Special Study	Source Water
Field Measurements	Flow (cfs)	Water	x	x	x	x	x
	Photo Documentation	Water	x	x	x	x	x
	Electrical Conductivity (µS/cm)	Water	x	x	x	x	x
	Temperature (°c)	Water	x	x	x	x	x
	pH	Water	x	x	x	x	x
	Dissolved Oxygen (mg/L)	Water	x	x	x	x	x
Drinking Water	Bromide (Br)	Water	x	x	x	x	
	Dissolved Organic Carbon (DOC	Water	x	x	x	x	
	E. Coli	Water	x	x	x	x	x
	Total Organic Carbon (TOC)	Water	x	x	x	x	
Gen Phys	Hardness (as CAC03)	Water	x	x	x	x	x
	Total Dissolved Solids (TDS)	Water	x	x	x	x	x
	Total Suspended (TSS)	Water	x	x	x	x	x
	Turbidity	Water	x	x	x	x	x
Metals	Arsenic	Water	x		x		
	Boron	Water	x		x	x	x
	Cadmium	Water	x		x		
	Copper	Water	x		x	x	x
	Lead	Water	x		x		
	Nickel	Water	x		x	x	x
	Selenium	Water	x		x		
	Zinc	Water	x		x	x	x
Nutrients	Ammonia (as N)	Water	x	x	x	x	
	Nitrogen, Nitrate-Nitrite	Water	x	x	x	x	
	Total Kjeldahl Nitrogen	Water	x	x	x	x	
	Total Phosphorus as P	Water	x	x	x	x	
	Ortho Phosohate as P (Soluble)	Water	x	x	x	x	
Toxicity	Ceriodaphnia dubia	Water	x		x	See Attachment 1	
	Pimephales promelas	Water	x		x		
	Selenastrum capricornium	Water	x		x		

TABLE 6: Pesticide Analysis

	Material	Matrix	Assessment	Core	Rain Event	Source
OP Pesticides	Azinphos-methyl	X	X	(no pesticides)	X	X
	Chlorpyrifos	X	X		X	X
	Demeton-s	X	X		X	X
	Diazinon	X	X		X	X
	Dichlorvos	X	X		X	X
	Dimethoate	X	X		X	X
	Disulfoton	X	X		X	X
	EPTC	X	X		X	X
	malathion	X	X		X	X
	Methamidophos	X	X		X	X
	Methidathion	X	X		X	X
	Parathion-ethyl	X	X		X	X
	Parathion-methyl	X	X		X	X
	Phorate	X	X		X	X
	Phosmet	X	X		X	X
	Prowl (Pendamethalin)	X	X		X	X
	Trifluralin	X	X		X	X
Herbicides	Atrazine	X	X		X	
	Cyanazine	X	X		X	
	Diuron	X	X		X	
	Glyphosate	X	X		X	
	Linuron	X	X		X	
	Prowl (Pendamethalin)	X	X		X	X
	Simazine	X	X		X	
	Trifluralin	X	X		X	X
Addnl Group A OC Pesticides	Aldrin	X	X		X	
	a-BHC	X	X		X	
	b-BHC	X	X		X	
	d-BHC	X	X		X	
	g-BHC (Lindane)	X	X		X	
	a-Chlordane	X	X		X	
	g-Chlordane	X	X		X	
	Endosulfan I	X	X		X	
	Endosulfan II	X	X		X	
	Endosulfan sulfate	X	X		X	
	Heptachlor	X	X		X	
	Heptachlor epoxide	X	X		X	
	Toxaphene	X	X		X	
OC Pest (Base)	Dicofol	X	X		X	
	DDD (p,p')	X	X		X	
	DDE (p,p')	X	X		X	
	DDT (p,p')	X	X		X	
	Dieldrin	X	X		X	
	Endrin	X	X		X	
	Methoxychlor	X	X		X	
Carbamate Pest.	Aldicarb	X	X		X	
	Carbaryl	X	X		X	
	Carbofuran	X	X		X	
	Methiocarb	X	X		X	
	Methomyl	X	X		X	
	Oxamyl	X	X		X	

Appendix A
Chain of Custody Sheets and Data Summary

Appendix A
Definitions

Sample Type:
E: Event sample
FD: Field duplicate sample
FB: Field blank sample.

Result Flags:
ND: Not Detected.
DNQ: Estimated result, detected below Reporting Limit.

Note: Pesticides with results indicating "Non-Detect" are not reported in this summary. See **Table 7** for a list of analytes. See **Appendix C** for the laboratory data reports.

Appendix A
Chain of Custody Sheets

2.0
2.0
2.0°C
2.0°C

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD 71624

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619	Carbamates: EPA 8321	Herbicides: EPA 8321A (diuron and linuron) and EPA 619(atrazine, cyanazine, and simazine)	OC Pesticides: "Base" EPA 8081	OC Pesticides: "Group A" EPA 8081				
1	**106-LBCHW-PB**	10-Sep-13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
2	**106-LBCHW-PD**	10-Sep-13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
3	106-LBCHW-PE	10-Sep-13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
4	106-SJRLA-PE	10-Sep-13	11:00	FW	5	1-L amber	X	X	X		X						
5	106-SSALA-PE	10-Sep-13	11:30	FW	6	1-L amber	X	X	X	X	X	X	X				
6	106-MSUSL-PE	10-Sep-13	12:05	FW	6	1-L amber	X	X	X	X	X	X	X				
7	106-SJRSD-PE	10-Sep-13	13:45	FW	5	1-L amber	X	X	X								
8	**106-LBCHW-PM**	10-Sep-13	9:30	FW	3	1-G amber	X	X	X	X	X	X	X				

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

106-LBCHW-PB = Field Blank

106-LBCHW-PD = Field Duplicate

106-LBCHW-PM = MS/MSD

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	[signature]	Signature:	[signature]
Print:	Tyler Avila	Print:	DOUG RICHMANN
Organization:	CEID	Organization:	EX MILE
DATE: 9-10-13	TIME: 15:10	DATE: 9-11-13	TIME: 1500

RECEIVED BY			
Signature:	[signature]	Signature:	[signature]
Print:	DOUG RICHMAN	Print:	Will Cakavich
Organization:	EX MILE	Organization:	APPL
DATE: 9-10-13	TIME: 1510	DATE: 9-12-13	TIME: 0800

***MATRIX CODES**: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	KL & JH
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619								
1	106-DMCDP-PE	10-Sep-13	1300	FW	5	1-L amber	X	X	X								
2	106-SJRPP-PE	10-Sep-13	1400	FW	5	1-L amber	X	X	X								

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	Kraig Lippert	**Signature:**	[illegible]
Print:	KRAIG Lippert	**Print:**	DOUG RICHARDS
Organization:	DRWD	**Organization:**	EP MILE
DATE: 9-10-13	**TIME:** 1530	**DATE:** 9-11-13	**TIME:** 1800

RECEIVED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	DOUG RICHARDS	**Print:**	Will Lakovich
Organization:	EP MILE	**Organization:**	APPL
DATE: 9-10-13	**TIME:** 1530	**DATE:** 9-12-13	**TIME:** [illegible]

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

4.0°c, 4.0c, 4.0°c 718
4.0°c, 4.0°c 10-9-13

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619	Carbamates: EPA 8321	Herbicides: EPA 8321A (diuron and linuron) and EPA 619(atrazine, cyanazine, and simazine)	OC Pesticides: "Base" EPA 8081	OC Pesticides: "Group A" EPA 8081				
1	**107-LBCHW-PB**	10/08/13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
2	**107-LBCHW-PD**	10/08/13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
3	107-LBCHW-PE	10/08/13	9:30	FW	6	1-L amber	X	X	X	X	X	X	X				
4	107-SJRLA-PE	10/08/13	11:08	FW	5	1-L amber	X	X	X		X						
5	107-SSALA-PE	10/08/13	11:35	FW	6	1-L amber	X	X	X	X	X	X	X				
6	107-MSUSL-PE	10/08/13	12:10	FW	6	1-L amber	X	X	X	X	X	X	X				
7	107-SJRSD-PE	10/08/13	13:45	FW	5	1-L amber	X	X	X								
8	**107-LBCHW-PM**	10/08/13	9:30	FW	3	1-G amber	X	X	X	X	X	X	X				

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

107-LBCHW-PB = Field Blank

107-LBCHW-PD = Field Duplicate

107-LBCHW-PM = MS/MSD

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	Tyler Avila	**Print:**	DOUG RICHARDS
Organization:	CCID	**Organization:**	EXO MIUE
DATE: 10-8-13	**TIME:** 15:30	**DATE:** 10-9-13	**TIME:** 0825

RECEIVED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	DOUG RICHARDS	**Print:**	YANG LOR
Organization:	EXO MIUE	**Organization:**	APPL Inc
DATE: 10-8-13	**TIME:** 1530	**DATE:** 10/9/13	**TIME:** 08:25

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	John Hansen / Craig Lippencott
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619
1	107-DMCDP-PE	10/08/13	1500	FW	5	1-L amber	X	X	X
2	107-SJRPP-PE	10/08/13	1330	FW	5	1-L amber	X	X	X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELINQUISHED BY			
Signature:	[signature]	Signature:	[signature]
Print:	John Hansen	Print:	DOUG RICHARDS
Organization:	DFWD	Organization:	EA MLE
DATE: 10/8/13	TIME: 1600	DATE: 10-9-13	TIME: 0825

RECEIVED BY			
Signature:	[signature]	Signature:	[signature]
Print:	DOUG RICHARDS	Print:	YANG LOR
Organization:	EA MLE	Organization:	APPL Inc
DATE: 10-8-13	TIME: 1600	DATE: 10/9/13	TIME: 08:25

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

48

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

11-12-13a

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619	Carbamates: EPA 8321	Herbicides: EPA 8321A (diuron and linuron) and EPA 619(atrazine, cyanazine, and simazine)	OC Pesticides: "Base" EPA 8081	OC Pesticides: "Group A" EPA 8081				
1	**108-LBCHW-PB**	11/12/13	9:20	FW	6	1-L amber	X	X	X	X	X	X	X				
2	**108-LBCHW-PD**	11/12/13	9:20	FW	6	1-L amber	X	X	X	X	X	X	X				
3	108-LBCHW-PE	11/12/13	9:20	FW	6	1-L amber	X	X	X	X	X	X	X				
4	108-SJRLA-PE	11/12/13	11:00	FW	5	1-L amber	X	X	X		X						
5	108-SSALA-PE	11/12/13	11:30	FW	6	1-L amber	X	X	X	X	X	X	X				
6	108-MSUSL-PE	11/12/13	12:00	FW	6	1-L amber	X	X	X	X	X	X	X				
7	108-SJRSD-PE	11/12/13	13:20	FW	5	1-L amber	X	X	X								
8	**108-LBCHW-PM**	11/12/13	9:20	FW	3	1-G amber	X	X	X	X	X	X	X				

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

108-LBCHW-PB = Field Blank

108-LBCHW-PD = Field Duplicate

108-LBCHW-PM = MS/MSD

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	Tyler Avila	**Print:**	DOUG RICHARDS
Organization:	CCID	**Organization:**	EX MIUE
DATE: 11-12-13	**TIME:** 15:25	**DATE:** 11-13-13	**TIME:** 1155

RECEIVED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	DOUG RICHARDS	**Print:**	YANG LOR
Organization:	EX MIUE	**Organization:**	APPL Inc
DATE: 11-12-13	**TIME:** 1525	**DATE:** 11/13/13	**TIME:** 1155

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

7148

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

11/21/13 b

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Kraig Lippincott
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619								
1	108-DMCDP-PE	11/12/13	1430	FW	5	1-L amber	X	X	X								
2	108-SJRPP-PE	11/12/13	1230	FW	5	1-L amber	X	X	X								

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	Kraig Lippincott	**Signature:**	[illegible]
Print:	KRAIG LIPPINCOTT	**Print:**	DOUG RICHARDS
Organization:	DPWD	**Organization:**	EXMILE
DATE: 11-12-13	**TIME:** 1500	**DATE:** 11-12-13	**TIME:** 1155

RECEIVED BY

Signature:	[illegible]	**Signature:**	Yang Lor
Print:	DOUG RICHARDS	**Print:**	YANG LOR
Organization:	EXMILE	**Organization:**	APPL Inc
DATE: 11-12-13	**TIME:** 1500	**DATE:** 11/13/13	**TIME:** 11:55

***MATRIX CODES**: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

2307

A 3.0 3.0 3.0 3.8

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Hultz
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619	Carbamates: EPA 8321	Herbicides: EPA 8321A (diuron and linuron) and EPA 619(atrazine, cyanazine, and simazine)	OC Pesticides: "Base" EPA 8081	OC Pesticides: "Group A" EPA 8081				
1	**109-LBCHW-PB**	12/10/13	10:20	FW	6	1-L amber	X	X	X	X	X	X	X				
2	**109-LBCHW-PD**	12/10/13	10:20	FW	6	1-L amber	X	X	X	X	X	X	X				
3	109-LBCHW-PE	12/10/13	10:20	FW	6	1-L amber	X	X	X	X	X	X	X				
4	109-SJRLA-PE	12/10/13	12:15	FW	5	1-L amber	X	X	X		X						
5	109-SSALA-PE	12/10/13	12:45	FW	6	1-L amber	X	X	X	X	X	X	X				
6	109-MSUSL-PE	12/10/13	13:25	FW	6	1-L amber	X	X	X	X	X	X	X				
7	109-SJRSD-PE	12/10/13	15:00	FW	5	1-L amber	X	X	X								
8	**109-LBCHW-PM**	12/10/13	10:20	FW	3	1-G amber	X	X	X	X	X	X	X				

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

109-LBCHW-PB = Field Blank

109-LBCHW-PD = Field Duplicate

109-LBCHW-PM = MS/MSD

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	Tyler Hultz	**Print:**	DOUG RICHARDS
Organization:	CCID	**Organization:**	EXMIL
DATE: 12-10-13	**TIME:** 16:12	**DATE:** 12-10-13	**TIME:** 1425

RECEIVED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	DOUG RICHARDS	**Print:**	YANG LOR
Organization:	EXMIL	**Organization:**	APPL Inc
DATE: 12-10-13	**TIME:** 1612	**DATE:** 12/11/13	**TIME:** 14:25

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

B

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619								
1	109-DMCDP-PE	12/10/13	1430	FW	5	1-L amber	X	X	X								
2	109-SJRPP-PE	12/10/13	1300	FW	5	1-L amber	X	X	X								

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	Kraig Lippincott	Signature:	[illegible]
Print:	KRAIG LIPPINCOTT	Print:	DOUG RICHARDS
Organization:	DPWD	Organization:	EX MILE
DATE: 12-10-13	TIME: 1530	DATE: 12-11-13	TIME: 1425

RECEIVED BY			
Signature:	[illegible]	Signature:	Yang Lor
Print:	DOUG RICHARDS	Print:	YANG LOR
Organization:	EX MILE	Organization:	APPL Inc
DATE: 12-10-13	TIME: 1530	DATE: 12/11/13	TIME:

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

14:25

2.0, 2.0, 2.0, 2.0, 2.

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin): EPA 8141	OP Pesticides: EPA 8141A/619	Carbamates: EPA 8321	Herbicides: EPA 8321A (diuron and linuron) and EPA 619(atrazine, cyanazine, and simazine)	OC Pesticides: "Base" EPA 8081	OC Pesticides: "Group A" EPA 8081				
1	110-LBCHW-PB	01/14/14	9:45	FW	6	1-L amber	X	X	X	X	X	X	X				
2	110-LBCHW-PD	01/14/14	9:45	FW	6	1-L amber	X	X	X	X	X	X	X				
3	110-LBCHW-PE	01/14/14	9:45	FW	6	1-L amber	X	X	X	X	X	X	X				
4	110-SJRLA-PE	01/14/14	11:10	FW	5	1-L amber	X	X	X		X						
5	110-SSALA-PE	01/14/14	11:35	FW	6	1-L amber	X	X	X	X	X	X	X				
6	110-MSUSL-PE	01/14/14	12:10	FW	6	1-L amber	X	X	X	X	X	X	X				
7	110-SJRSD-PE	01/14/14	13:30	FW	5	1-L amber	X	X	X								
8	110-LBCHW-PM	01/14/14	9:45	FW	3	1-G amber	X	X	X	X	X	X	X				

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

110-LBCHW-PB = Field Blank

110-LBCHW-PD = Field Duplicate

110-LBCHW-PM = MS/MSD

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	Signature:	[illegible]
Print:	Tyler Avila	Print:	DOUG RICHARDS
Organization:	CCID	Organization:	EXMILE
DATE: 1-14-14	TIME: 15:20	DATE: 1-15-14	TIME: 1045

RECEIVED BY

Signature:	[illegible]	Signature:	[illegible]
Print:	DOUG RICHARDS	Print:	YANG LOR
Organization:	EXMILE	Organization:	APPL In
DATE: 1-14-14	TIME: 1520	DATE: 1/15/14	TIME: 10:45

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

2481b

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141	OP Pesticides: EPA 8141A/619								
1	110-DMCDP-PE	01/14/14	1400	FW	5	1-L amber	X	X	X								
2	110-SJRPP-PE	01/14/14	1130	FW	5	1-L amber	X	X	X								

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

OP Pesticides=Azinphos-methyl, Chlorpyrifos, Dementon-S, Diazinon, Dichlorovos, Dimethoate, Disulfoton, Malathion, Methidathion, Methamidophos, ethyl Parathion, methyl Parathion, Phorate, Phosmet, and EPTC.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	Kraig Lippincott	Signature:	[illegible]
Print:	KRAIG LIPPINCOTT	Print:	DOUG RICHARDS
Organization:	DPWD	Organization:	EX MILE
DATE: 1-14-14	TIME: 1430	DATE: 1-15-14	TIME: 1045

RECEIVED BY			
Signature:	[illegible]	Signature:	Yang Lor
Print:	DOUG RICHARDS	Print:	YANG LOR
Organization:	EX MILE	Organization:	APPL Inc
DATE: 1-14-14	TIME: 1430	DATE: 1/15/14	TIME: 10:45

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

7 12

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD A

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Pesticides: "Extended List" EPA 8081, EPA 8321, EPA 8141/619 (See Project specific analyses)**	*Pesticides: "Group A" EPA 8081	Herbicides (EPA 8321, EPA 619, EPA 8141)	** Carbamates: EPA 8321	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141					
1	R14-PSAIA-PB	2-10-14	14:55	FW	6	1-L amber	X	X	X	X	X	X					
2	R14-PSAIA-PD		14:55	FW	6	1-L amber	X	X	X	X	X	X					
3	R14-LBCCC-PE		8:10	FW	6	1-L amber	X	X	X	X	X	X					
4	R14-NWHFR-PE		9:20	FW	6	1-L amber	X	X	X	X	X	X					
5	R14-LBCHW-PE		11:15	FW	6	1-L amber	X	X	X	X	X	X					
6	R14-TSAER-PE		11:50	FW	6	1-L amber	X	X	X	X	X	X					
7	R14-SJRLA-PE		12:35	FW	6	1-L amber	X	X	X	X	X	X					
8	R14-SSALA-PE		13:05	FW	6	1-L amber	X	X	X	X	X	X					
9	R14-MSUSL-PE		10:25	FW	6	1-L amber	X	X	X	X	X	X					
10	R14-SSASD-PE		14:00	FW	6	1-L amber	X	X	X	X	X	X					
11	R14-PSAIA-PE		14:55	FW	6	1-L amber	X	X	X	X	X	X					
12	R14-SJRSD-PE		16:15	FW	6	1-L amber	X	X	X	X	X	X					
13	R14-PSAIA-PM		14:55	FW	5	multiple	X	X	X	X	X	X					

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

R14-PSAIA-PB = Field Blank

R14-PSAIA-PD = Field Duplicate

R14-PSAIA-PM = MS/MSD

*Analyze for: aldrin, chlorodane, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[signature]	Signature:	[signature]
Print:	Tyler Avila	Print:	DOUG RICHARDS
Organization:	CCID	Organization:	EPMILE
DATE: 2-10-14	TIME: 18:10	DATE: 2-11-14	TIME: 1135

RECEIVED BY

Signature:	[signature]	Signature:	[signature]
Print:	DOUG RICHARDS	Print:	YANG LOR
Organization:	EPMILE	Organization:	APPL Inc
DATE: 2-10-14	TIME: 1810	DATE: 2/11/14	TIME: 11:35

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

APPL CHAIN-OF-CUSTODY RECORD

B

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Craig Lipscutt
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Pesticides: "Extended List" EPA 8081, EPA 8321, EPA 8141/619 (See Project specific analyses)**	*Pesticides: "Group A" EPA 8081	Herbicides (EPA 8321, EPA 619, EPA 8141)	** Carbamates: EPA 8321	Trifluralin: EPA 8141	Prowl (Pendimethalin), EPA 8141					
1	R14-VH132-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
2	R14-HCARR-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
3	R14-ICARR-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
4	R14-WWNCR-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
5	R14-DPCCR-PE	2/10/14	0900	FW	6	1-L amber	X	X	X	X	X	X					
6	R14-DPCHW-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
7	R14-ROLFA-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
8	R14-MRDRR-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
9	R14-OCARR-PE	—	—	FW	6	1-L amber	X	X	X	X	X	X					
10	R14-OCAHW-PE	2/10/14	1400	FW	6	1-L amber	X	X	X	X	X	X					
11	R14-DMCDP-PE	2/10/14	1000	FW	6	1-L amber	X	X	X	X	X	X					
12	R14-SJRPP-PE	2/10/14	1100	FW	6	1-L amber	X	X	X	X	X	X					
13																	
14																	
15																	

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

*Analyze for: aldrin, chlorodane, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene

** Carbamate analyses must be low level detection

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	[signature]	Signature:	[signature]
Print:	John Hansen	Print:	DOUG RICHARDS
Organization:	DOWD	Organization:	EXMILE 1135
DATE: 2/10/14	TIME: 1630	DATE: 2-11-14	TIME:

RECEIVED BY			
Signature:	[signature]	Signature:	[signature]
Print:	DOUG RICHARDS	Print:	YANG COR
Organization:	EXMILE	Organization:	APPL Inc
DATE: 2-10-14	TIME: 1630	DATE: 2/11/14	TIME: 11:35

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel,and Zinc (Unpreserved, **Needs Filtration ASAP**)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel,Selenium, and Zinc (Preserved with HNO3)
1	**106-LBCHW-QB**	10-Sep-13		FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
2	**106-LBCHW-QD**	10-Sep-13		FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
3	106-LBCCC-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
4	~~106-NWHFR-QE~~	~~10-Sep-13~~		FW	6	Multiple Types	X	X	X	X	X	X		X			
5	106-LBCHW-QE	10-Sep-13		FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
6	106-TSAER-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
7	106-SJRLA-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
8	106-SSALA-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
9	106-MSUSL-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
10	106-PSAIA-QE	10-Sep-13		FW	6	Multiple Types	X	X	X	X	X	X		X			
11	106-SJRSD-QE	10-Sep-13		FW	4	Multiple Types		X				X		X	X	X	
12	**106-LBCHW-QM**	10-Sep-13		FW	12	Multiple Types	X		X	X	X	X	X				X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

106-LBCHW-QB = Field Blank

106-LBCHW-QD = Field Duplicate

106-LBCHW-QM = MS/MSD

TEMP (°C):

SEALED:

INTACT:

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:		Signature:	Michelle Kawaguchi
Print:		Print:	Michelle Kawaguchi
Organization:		Organization:	PER
DATE:	TIME:	DATE: 9/11/13	TIME: 0645

RECEIVED BY

Signature:	[illegible]	Signature:	
Print:	GLEN IMLIE	Print:	
Organization:	CALTEST	Organization:	
DATE: 9/11/13	TIME: 0845	DATE:	TIME:

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

9/11/13

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	[illegible]
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)
1	106-VH132-QE	10-Sep-13	0800	FW	6	Multiple Types	X	X	X	X	X	X	X		
2	106-ICARR-QE	10-Sep-13	0830	FW	6	Multiple Types	X	X	X	X	X	X	X		
3	106-WWNCR-QE	10-Sep-13	0900	FW	6	Multiple Types	X	X	X	X	X	X	X		
4	106-DPCCR-QE	10-Sep-13	0930	FW	6	Multiple Types	X	X	X	X	X	X	X		
5	106-ROLFA-QE	10-Sep-13	1030	FW	6	Multiple Types	X	X	X	X	X	X	X		
6	106-MRDRR-QE	10-Sep-13	1130	FW	6	Multiple Types	X	X	X	X	X	X	X		
7	~~106-OCARR-QE~~	~~10-Sep-13~~		~~FW~~	~~6~~	~~Multiple Types~~	X	X	X	X	X	X	X		
8	106-DMCDP-QE	10-Sep-13	1300	FW	4	Multiple Types		X				X	X	X	X
9	106-SJRPP-QE	10-Sep-13	1400	FW	4	Multiple Types		X				X	X	X	X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

TEMP. (°C): [illegible]
SEALED: [illegible]
INTACT: [illegible]

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	**Signature:**	Michelle Kawaguchi
Print:	Kraig [illegible]	**Print:**	Michelle Kawaguchi
Organization:	DPWD	**Organization:**	PER
DATE: 9-10-13	**TIME:** 1530	**DATE:** 9/11/13	**TIME:** 0645

RECEIVED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	GLEN IMRIE	**Print:**	[illegible]
Organization:	CALTEST	**Organization:**	[illegible]
DATE: 9/11/13	**TIME:** 0645	**DATE:** [illegible]	**TIME:** [illegible]

***MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)**

[illegible]

N040974

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Kevin Lippincott & John Hansen (Sub-sample MM)
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	PYRD.NCI.S	8081.S									
1	106-HCARR-STE	09/09/13	9:30	SED	1	500mL glass jar	X	X									
2	106-ICARR-STE	09/09/13	10:15	SED	1	500mL glass jar	X	X									
3	106-WWNCR-STE	09/09/13	11:30	SED	1	500mL glass jar	X	X									
4	106-DPCHW-STE	09/09/13	13:30	SED	1	500mL glass jar	X	X									

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments: Profile #85747

Lab and Field Duplicate = **None**

Caltest internal MS/MSD = **None** (Do not invoice)

*Analyze for bifenthrin, chlorpyrifos, cyfluthrin, lambda cyhalothrin, cypermethrin, esfenvalerate/fenvalerate, fenprpathrin, permethrin, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at 707-207-7916"

RELIQUINSHED BY			
Signature:	[signature]	**Signature:**	[signature]
Print:	M. McElroy	**Print:**	GLEN IMAIE
Organization:	PER	**Organization:**	CALTEST
DATE: 9/27/13	**TIME:** 0740	**DATE:** 9/27/13	**TIME:** 8:12

RECEIVED BY			
Signature:	[signature]	**Signature:**	[signature]
Print:	GLEN IMAIE	**Print:**	L. Gaeton
Organization:	CALTEST	**Organization:**	Caltest
DATE: 9/27/13	**TIME:** 0740	**DATE:** 9/27/13	**TIME:** 8:12

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

TEMP. (°C): 1.8
SEALED: YES
INTACT: YES

NIC0408

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel,and Zinc (Unpreserved, **Needs Filtration ASAP**)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel,Selenium, and Zinc (Preserved with HNO3)
1	-2 **107-LBCHW-QB**	10/08/13	9:30	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
2	-3 **107-LBCHW-QD**	10/08/13	9:30	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
3	-4 107-LBCCC-QE	10/08/13	8:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
4	-5 107-NWHFR-QE	10/08/13	9:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
5	-1 107-LBCHW-QE	10/08/13	9:30	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
6	-6 107-TSAER-QE	10/08/13	10:40	FW	6	Multiple Types	X	X	X	X	X	X		X			
7	-7 107-SJRLA-QE	10/08/13	11:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
8	-8 107-SSALA-QE	10/08/13	11:35	FW	6	Multiple Types	X	X	X	X	X	X		X			
9	-9 107-MSUSL-QE	10/08/13	12:10	FW	6	Multiple Types	X	X	X	X	X	X		X			
10	-10 107-PSAIA-QE	10/08/13	13:20	FW	6	Multiple Types	X	X	X	X	X	X		X			
11	-18 107-SJRSD-QE	10/08/13	13:45	FW	4	Multiple Types		X				X		X	X	X	
12	-1 **107-LBCHW-QM**	10/08/13	9:30	FW	12	Multiple Types	X		X	X	X	X	X				X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

107-LBCHW-QB = Field Blank

107-LBCHW-QD = Field Duplicate

107-LBCHW-QM = MS/MSD

TEMP. (°C): 1.0

SEALED: Y

INTACT: Y

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY (Rel by)

Signature:	[signature]	Signature:	Michelle Kawaguchi
Print:	Tyler Avila	Print:	Michelle Kawaguchi
Organization:	CALID	Organization:	PER
DATE: 10-8-13	TIME: 15:30	DATE: 10/9/13	TIME: 0640

RECEIVED BY (Rec by)

Signature:	[signature]	Signature:	[signature]
Print:	John Lam	Print:	Cal Test
Organization:	Cal Test	Organization:	John Lam
DATE: 10-9-13	TIME: 0640	DATE: 10-9-13	TIME: 0715

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Rec by: [signature]

N1C4C3

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Kristi Lippmann
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)
1	-11 107-VH132-QE	10/08/13	0900	FW	6	Multiple Types	X	X	X	X	X	X	X		
2	-12 107-ICARR-QE	10/08/13	1000	FW	6	Multiple Types	X	X	X	X	X	X	X		
3	-13 107-WWNCR-QE	10/08/13	1030	FW	6	Multiple Types	X	X	X	X	X	X	X		
4	-14 107-DPCCR-QE	10/08/13	1100	FW	6	Multiple Types	X	X	X	X	X	X	X		
5	-15 107-ROLFA-QE	10/08/13	1300	FW	6	Multiple Types	X	X	X	X	X	X	X		
6	-16 107-MRDRR-QE	10/08/13	1400	FW	6	Multiple Types	X	X	X	X	X	X	X		
7	-17 107-OCARR-QE	10/08/13	1130	FW	6	Multiple Types	X	X	X	X	X	X	X		
8	-19 107-DMCDP-QE	10/08/13	1500	FW	4	Multiple Types		X				X	X	X	X
9	-20 107-SJRPP-QE	10/08/13	1330	FW	4	Multiple Types		X				X	X	X	X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

TEMP. (°C): 1.0
SEALED: Y
INTACT: Y

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY Rel by

Signature:	[signature]	**Signature:**	Michelle Kawaguchi
Print:	John Hamden	**Print:**	Michelle Kawaguchi
Organization:	DPWD	**Organization:**	DER
DATE: 10/8/13	**TIME:** 1600	**DATE:** 10/9/13	**TIME:** 0640

RECEIVED BY Rec by

Signature:	[signature]	**Signature:**	[signature]
Print:	John Lam	**Print:**	John Lam
Organization:	Cal Test	**Organization:**	Cal Test
DATE: 10-9-13	**TIME:** 0640	**DATE:** 10-9-13	**TIME:** 0715

***MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)**

Rec by Lab

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel,and Zinc (Unpreserved, **Needs Filtration ASAP**)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel,Selenium, and Zinc (Preserved with HNO3)
1	108-LBCHW-QB	11/12/13	9:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
2	108-LBCHW-QD	11/12/13	9:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
3	108-LBCCC-QE	11/12/13	8:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
4	108-NWHFR-QE	11/12/13	8:45	FW	6	Multiple Types	X	X	X	X	X	X		X			
5	108-LBCHW-QE	11/12/13	9:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
6	108-TSAER-QE	11/12/13	10:45	FW	6	Multiple Types	X	X	X	X	X	X		X			
7	108-SJRLA-QE	11/12/13	11:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
8	108-SSALA-QE	11/12/13	11:30	FW	6	Multiple Types	X	X	X	X	X	X		X			
9	108-MSUSL-QE	11/12/13	12:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
10	108-PSAIA-QE	11/12/13	13:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
11	108-SJRSD-QE	11/12/13	13:20	FW	4	Multiple Types		X				X		X	X	X	
12	108-LBCHW-QM	11/12/13	9:20	FW	12	Multiple Types	X		X	X	X	X	X				X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

108-LBCHW-QB = Field Blank

108-LBCHW-QD = Field Duplicate

108-LBCHW-QM = MS/MSD

TEMP. (°C):

SEALED:

INTACT:

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	Signature:	[illegible]
Print:	Tyler Avila	Print:	Glen Imble
Organization:	CCID	Organization:	[illegible]
DATE: 11-12-13	TIME: 15:25	DATE: [illegible]	TIME:

RECEIVED BY

Signature:	[illegible]	Signature:	[illegible]
Print:	GLEN IMBLE	Print:	[illegible]
Organization:	CALTEST	Organization:	[illegible]
DATE: 11/13/13	TIME: 0645	DATE: [illegible]	TIME:

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	[illegible]
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)
1	~~108-VH132-QE~~	~~11/12/13~~		~~FW~~	~~6~~	~~Multiple Types~~	X	X	X	X	X	X	X		
2	~~108-ICARR-QE~~	~~11/12/13~~		~~FW~~	~~6~~	~~Multiple Types~~	X	X	X	X	X	X	X		
3	-11 108-WWNCR-QE	11/12/13	[illegible]	FW	6	Multiple Types	X	X	X	X	X	X	X		
4	-12 108-DPCCR-QE	11/12/13	1130	FW	6	Multiple Types	X	X	X	X	X	X	X		
5	-13 108-ROLFA-QE	11/12/13	1300	FW	6	Multiple Types	X	X	X	X	X	X	X		
6	-14 108-MRDRR-QE	11/12/13	1400	FW	6	Multiple Types	X	X	X	X	X	X	X		
7	~~108-OCARR-QE~~	~~11/12/13~~		~~FW~~	~~6~~	~~Multiple Types~~	X	X	X	X	X	X	X		
8	-15 108-DMCDP-QE	11/12/13	1430	FW	4	Multiple Types		X				X	X	X	X
9	-16 108-SJRPP-QE	11/12/13	1250	FW	4	Multiple Types		X				X	X	X	X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

TEMP. (°C): [illegible]
SEALED: YES
INTACT: YES

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	KARE [illegible]	**Print:**	[illegible]
Organization:	DFWD	**Organization:**	[illegible]
DATE: 11-12-13	**TIME:** 1500	**DATE:** [illegible]	**TIME:** 0725

RECEIVED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	GLEN TIMBLE	**Print:**	[illegible]
Organization:	CALTEST	**Organization:**	[illegible]
DATE: 11/13/13	**TIME:** 0645	**DATE:** [illegible]	**TIME:** [illegible]

***MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)**

N126122

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tulu Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel,and Zinc (Unpreserved, **Needs Filtration ASAP**)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel,Selenium, and Zinc (Preserved with HNO3)
1	-2 **109-LBCHW-QB**	12/10/13	10:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
2	-3 **109-LBCHW-QD**	12/10/13	10:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
3	-4 109-LBCCC-QE	12/10/13	8:50	FW	6	Multiple Types	X	X	X	X	X	X		X			
4	-5 109-NWHFR-QE	12/10/13	9:30	FW	6	Multiple Types	X	X	X	X	X	X		X			
5	-1 109-LBCHW-QE	12/10/13	10:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
6	-6 109-TSAER-QE	12/10/13	11:45	FW	6	Multiple Types	X	X	X	X	X	X		X			
7	-7 109-SJRLA-QE	12/10/13	12:15	FW	6	Multiple Types	X	X	X	X	X	X		X			
8	-8 109-SSALA-QE	12/10/13	12:45	FW	6	Multiple Types	X	X	X	X	X	X		X			
9	-9 109-MSUSL-QE	12/10/13	13:35	FW	6	Multiple Types	X	X	X	X	X	X		X			
10	-10 109-PSAIA-QE	12/10/13	14:40	FW	6	Multiple Types	X	X	X	X	X	X		X			
11	-17 109-SJRSD-QE	12/10/13	15:05	FW	4	Multiple Types		X				X		X	X	X	
12	-1 **109-LBCHW-QM**	12/10/13	10:20	FW	12	Multiple Types	X		X	X	X	X	X				X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

109-LBCHW-QB = Field Blank

109-LBCHW-QD = Field Duplicate

109-LBCHW-QM = MS/MSD

TEMP (°C) 15
YES
YES
YES

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	Signature:	Michelle Kawaguchi
Print:	Tulu Avila	Print:	Michelle Kawaguchi
Organization:	CAL	Organization:	PER
DATE: 12-12-13	TIME: 1612	DATE: 12/11/13	TIME: 0630

RECEIVED BY

Signature:	[illegible]	Signature: Rec by	[illegible]
Print:	GLEN IMRIE	Print:	GLEN IMRIE
Organization:	CALTEST	Organization:	CALTEST
DATE: 12/11/13	TIME: 0630	DATE: 12/11/13	TIME: 0734

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Rec by [illegible]

N120' 22

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)
1	~~109-VH132-QE~~	~~12/10/13~~		~~FW~~	~~6~~	~~Multiple Types~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
2	~~109-ICARR-QE~~	~~12/10/13~~		~~FW~~	~~6~~	~~Multiple Types~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
3	-11 109-WWNCR-QE	12/10/13	1030	FW	6	Multiple Types	X	X	X	X	X	X	X		
4	-12 109-DPCCR-QE	12/10/13	1130	FW	6	Multiple Types	X	X	X	X	X	X	X		
5	-13 109-ROLFA-QE	12/10/13	1330	FW	6	Multiple Types	X	X	X	X	X	X	X		
6	-14 109-MRDRR-QE	12/10/13	1400	FW	6	Multiple Types	X	X	X	X	X	X	X		
7	~~109-OCARR-QE~~	~~12/10/13~~		~~FW~~	~~6~~	~~Multiple Types~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
8	-15 109-DMCDP-QE	12/10/13	1430	FW	4	Multiple Types		X				X	X	X	X
9	-16 109-SJRPP-QE	12/10/13	1300	FW	4	Multiple Types		X				X	X	X	X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

15
YES
YES

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	Kraig Lippincott	**Signature:**	Michelle Kawaguchi
Print:	KRAIG LIPPINCOTT	**Print:**	Michelle Kawaguchi
Organization:	DPWD	**Organization:**	PER
DATE: 12-10-13	**TIME:** 1530	**DATE:** 12/11/13	**TIME:** 0630

RECEIVED BY

Signature:	[illegible]	**Signature:**	[illegible]
Print:	GLEN IMAIE	**Print:**	GLEN IMAIE
Organization:	CALTEST	**Organization:**	CALTEST
DATE: 12/11/13	**TIME:** 0630	**DATE:** 12/11/13	**TIME:** 0754

***MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)**

Rec by [illegible]

P010 57

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel,and Zinc (Unpreserved, **Needs Filtration ASAP**)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel,Selenium, and Zinc (Preserved with HNO3)
1	-2 110-LBCHW-QB	01/14/14	9:45	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
2	-3 110-LBCHW-QD	01/14/14	9:45	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
3	-4 110-LBCCC-QE	01/14/14	8:20	FW	6	Multiple Types	X	X	X	X	X	X		X			
4	-5 110-NWHFR-QE	01/14/14	9:00	FW	6	Multiple Types	X	X	X	X	X	X		X			
5	-1 110-LBCHW-QE	01/14/14	9:45	FW	7	Multiple Types	X	X	X	X	X	X	X	X			X
6	-6 110-TSAER-QE	01/14/14	10:50	FW	6	Multiple Types	X	X	X	X	X	X		X			
7	-7 110-SJRLA-QE	01/14/14	11:10	FW	6	Multiple Types	X	X	X	X	X	X		X			
8	-8 110-SSALA-QE	01/14/14	11:35	FW	6	Multiple Types	X	X	X	X	X	X		X			
9	-9 110-MSUSL-QE	01/14/14	12:10	FW	6	Multiple Types	X	X	X	X	X	X		X			
10	-10 110-PSAIA-QE	01/14/14	13:10	FW	6	Multiple Types	X	X	X	X	X	X		X			
11	-18 110-SJRSD-QE	01/14/14	13:30	FW	4	Multiple Types		X				X		X	X	X	
12	-1 110-LBCHW-QM	01/14/14	9:45	FW	12	Multiple Types	X		X	X	X	X	X				X

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

110-LBCHW-QB = Field Blank

110-LBCHW-QD = Field Duplicate

110-LBCHW-QM = MS/MSD

TEMP. (°C): 3.4
SEALED: YES
INTACT: YES

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY

Signature:	[illegible]	Signature:	Michelle Kawaguchi
Print:	Tyler Avila	Print:	Michelle Kawaguchi
Organization:	CALTEST	Organization:	PER
DATE: 1-14-14	TIME: 15:20	DATE: 1/15/14	TIME: 0655

RECEIVED BY

Signature:	[illegible]	Signature:	[illegible]
Print:	Keith Bowen	Print:	GLEN IMMIE
Organization:	PER	Organization:	CALTEST
DATE: 1/14/14	TIME: 1810	DATE: 1/15/14	TIME: 0655

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

RQ [illegible] 1/15/14 0803 Rec'd by [illegible]

PAGE 1

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Bromide (Total), Solub. Orthophos. (as P)	E. coli	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Turbidity, TDS, and TSS	Total Metals: Boron, Copper, Nickel, and Zinc (Preserved with HNO3)	Dissolved Metals: Copper, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)
1	-11 110-VH132-QE	01/14/14	830	FW	6	Multiple Types	X	X	X	X	X	X	X		
2	~~110-ICARR-QE~~	~~01/14/14~~		~~FW~~	~~6~~	~~Multiple Types~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
3	-12 110-WWNCR-QE	01/14/14	1000	FW	6	Multiple Types	X	X	X	X	X	X	X		
4	-13 110-DPCCR-QE	01/14/14	1045	FW	6	Multiple Types	X	X	X	X	X	X	X		
5	-14 110-ROLFA-QE	01/14/14	1230	FW	6	Multiple Types	X	X	X	X	X	X	X		
6	-15 110-MRDRR-QE	01/14/14	1330	FW	6	Multiple Types	X	X	X	X	X	X	X		
7	~~110-OCARR-QE~~	~~01/14/14~~		~~FW~~	~~6~~	~~Multiple Types~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		
8	-16 110-DMCDP-QE	01/14/14	1400	FW	4	Multiple Types		X				X	X	X	X
9	-17 110-SJRPP-QE	01/14/14	1130	FW	4	Multiple Types		X				X	X	X	X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

TEMP. (°C): 7.4
SEALED: YES
INTACT: YES

RELIQUINSHED BY			
Signature:	Kraig Lippincott	**Signature:**	Michelle Kawaguchi
Print:	KRAIG LIPPINCOTT	**Print:**	Michelle Kawaguchi
Organization:	DPWD	**Organization:**	PER
DATE: 1-14-14	**TIME:** 1430	**DATE:** 1/15/14	**TIME:** 0655

RECEIVED BY			
Signature:	[illegible]	**Signature:**	[illegible]
Print:	Kevin Bowen	**Print:**	GLEN IMAIB
Organization:	PER	**Organization:**	CALTEST
DATE: 1/14/14	**TIME:** 1810	**DATE:** 1/15/14	**TIME:** 0655

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

***MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)**

RQ [illegible] 1/15/14 0809 Rec by [illegible]

P020. 8

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

TEMP. (°C): 2.7
SEALED: Y
INTACT: Y

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Turbidity, TDS, TSS, Bromide (Total), Solub. Orthophos. (as P)	E. coli	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel, Selenium, and Zinc (Preserved with HNO3)	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel, and Zinc (Unpreserved, **Needs Filtration ASAP**)		
1	-2 R14-PSAIA-QB	~~14:55~~ 2-10	14:55	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
2	-3 R14-PSAIA-QD	~~14:55~~ 2-6	14:55	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
3	-4 R14-LBCCC-QE	2-10-14	8:10	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
4	-5 R14-NWHFR-QE	2-10-14	9:20	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
5	-6 R14-LBCHW-QE	~~[illegible]~~ 2-10-14	10:15	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
6	-7 R14-TSAER-QE	2-10-14	11:50	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
7	-8 R14-SJRLA-QE	2-10-14	12:35	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
8	-9 R14-SSALA-QE	2-10-14	13:05	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
9	-10 R14-MSUSL-QE	2-10-14	10:35	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
10	-11 R14-SSASD-QE	2-10-14	14:00	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
11	-1 R14-PSAIA-QE	2-10-14	14:55	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
12	-12 R14-SJRSD-QE	2-10-14	10:15	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
13	-1 R14-PSAIA-QM	2-10-14	14:55	FW	9	Multiple Types	X		X	X	X	X	X	X		

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

R14-PSAIA-QB = Field Blank

R14-PSAIA-QD = Field Duplicate

R14-PSAIA-QM = MS/MSD

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	[signature]	**Signature:**	[signature]
Print:	Tyler Avila	**Print:**	Tamara Luna
Organization:	CCID	**Organization:**	PER
DATE: 2-10-14	**TIME:** 18:50	**DATE:** 2/11/14	**TIME:** 0630

RECEIVED BY			
Signature:	[signature]	**Signature:**	[signature]
Print:	Tamara Luna	**Print:**	Matthew Kerr
Organization:	PER	**Organization:**	Caltest
DATE: 2/10/14	**TIME:** 0630	**DATE:** 2-11-14	**TIME:** 630

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Relinquished [signature] 2-11-14 0700 [signature]

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

TEMP. (°C): 4
SEALED: Y
INTACT: Y

PO20588

Caltest CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Kraig Lipscomb
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Turbidity, TDS, Bromide (Total), Solub. Orthophos. (as P)	E. coli	Total Metals: Arsenic, Boron, Cadmium, Copper, Lead, Nickel, Selenium, and Zinc (Preserved with HNO3)	TKN, Total NH3, Nitrogen (as NO3+ NO2), and Total Phosphate (as P)	TOC	DOC	Hardness as Ca CO3 (Preserved with HNO3)	Dissolved Metals: Cadmium, Copper, Lead, Nickel, and Zinc (Unpreserved, Needs Filtration ASAP)		
1	R14-VH132-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
2	R14-HCARR-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
3	R14-ICARR-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
4	R14-WWNCR-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
5	-13 R14-DPCCR-QE	2/10/14	0930	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
6	R14-DPCHW-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
7	R14-ROLFA-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
8	R14-MRDRR-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
9	R14-OCARR-QE	—	—	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
10	-14 R14-OCAHW-QE	2/10/14	1400	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
11	-15 R14-DMCDP-QE	2/10/14	1000	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
12	-16 R14-SJRPP-QE	2/10/14	1100	FW	7	Multiple Types	X	X	X	X	X	X	X	X		
13																
14																
15																

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

**Selenium by reaction cell.

"Upon receipt of samples, please fax a copy of the signed and received COC to Stephen Clark at (707) 207-7916"

RELIQUINSHED BY			
Signature:	[signature]	Signature:	[signature]
Print:	John Hansen	Print:	Tamara Luna
Organization:	DPWD	Organization:	PER
DATE:	2/10/14	TIME: 1630	DATE: 2/11/14 TIME: 0630

RECEIVED BY			
Signature:	[signature]	Signature:	[signature]
Print:	Tamara Luna	Print:	Matthew Karr
Organization:	PER	Organization:	Caltest
DATE: 2/11/14	TIME: 0630	DATE: 2-11-14	TIME: 630

*MATRIX CODES: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Relinquished [signature] 2-11-14 [signature] Lee Hartson

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Chronic *Selenastrum*	Acute *Ceriodaphnia*
1	**106-LBCHW-TD**	10-Sep-13	9:30	FW	5	1-G AmberGlass	X	X
2	106-LBCHW-TE	10-Sep-13	9:30	FW	5	1-G AmberGlass	X	X
3	106-SJRLA-TE	10-Sep-13	11:00	FW	~~5~~ 3	1-G AmberGlass		X
4	106-SSALA-TE	10-Sep-13	11:30	FW	~~5~~ 3	1-G AmberGlass		X
5	106-MSUSL-TE	10-Sep-13	12:05	FW	~~5~~ 3	1-G AmberGlass		X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

106-LBCHW-TD = Field Duplicate

CSR #1 Temp 2.1 °C
Cooler temp = 0.0°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	Tyler Avila	**Print:**	Y. Khadiyeva
Organization:	CCID	**Organization:**	PER
DATE: 9-10-13	**TIME:** 15:10	**DATE:** 9-11-13	**TIME:** 09:00

RECEIVED BY

Signature:		**Signature:**	
Print:		**Print:**	
Organization:		**Organization:**	
DATE:	**TIME:**	**DATE:**	**TIME:**

***MATRIX CODES:** (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Kraig Lippincott & John Hansen
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Acute Hyalella*										
1	106-VH132-STE	9/9/13	0900	SED	1	4-L Glass Jar	X										
2	106-HCARR-STE	9/9/13	0930	SED	1	4-L Glass Jar	X										
3	106-ICARR-STE	9/9/13	1015	SED	1	4-L Glass Jar	X										
4	106-WWNCR-STE	9/9/13	1130	SED	1	4-L Glass Jar	X										
5	106-DPCCR-STE	9/9/13	1230	SED	1	4-L Glass Jar	X										
6	106-DPCHW-STE	9/9/13	1330	SED	1	4-L Glass Jar	X										
7	106-ROLFA-STE	9/9/13	1430	SED	1	4-L Glass Jar	X										
8	~~106-OCARR-STE~~			~~SED~~	~~1~~	~~4-L Glass Jar~~	X										
9	~~106-OCAHW-STE~~			~~SED~~	~~1~~	~~4-L Glass Jar~~	X										

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

Field Duplicate = **None**

*As per MRP requirements, test samples for Hyalella survival only.

Cooler temp = 0.2°C

CSR#1 Temp 2.1°C

RELIQUINSHED BY

Signature:		**Signature:**	Gracie Galindo
Print:	John Hansen	**Print:**	Gracie Galindo
Organization:	Del Puerto W.D.	**Organization:**	PER
DATE: 9/9/13	**TIME:** 1600	**DATE:** 9/11/13	**TIME:** 0900

RECEIVED BY

Signature:		**Signature:**	
Print:		**Print:**	
Organization:		**Organization:**	
DATE:	**TIME:**	**DATE:**	**TIME:**

***MATRIX CODES**: (**SED** = Sediment); (**FW** = Freshwater); (**WW** = Wastewater); (**STRMW** = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Acute Hyalella*										
1	106-LBCCC-STE	9-9-13	11:30	SED	1	4-L Glass Jar	X										
2	106-NWHFR-STE	—	—	SED	1	4-L Glass Jar	X										
3	106-SSASD-STE	9-9-13	12:50	SED	1	4-L Glass Jar	X										
4	106-PSAIA-STE	9-9-13	13:55	SED	1	4-L Glass Jar	X										
5	106-PSAIA-STD	9-9-13	13:55	SED	1	4-L Glass Jar	X										

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

Field Duplicate = 106-PSAIA-STD

*As per MRP requirements, test samples for Hyalella survival only.

Cooler temp = 0.2°C

CSR #1 Temp 2.1°C

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	[signature]
Print:	Tyler Avila	**Print:**	Gracie Galindo
Organization:	CEIO	**Organization:**	PER
DATE: 9-10-13	**TIME:** 15:10	**DATE:** 9/11/13	**TIME:** ~~9:00~~ 0900

RECEIVED BY

Signature:		**Signature:**	
Print:		**Print:**	
Organization:		**Organization:**	
DATE:	**TIME:**	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Chronic *Selenastrum*	Acute *Ceriodaphnia*
1	107-LBCHW-TD	10/08/13	9:30	FW	5	1-G AmberGlass	X	X
2	107-LBCHW-TE	10/08/13	9:30	FW	5	1-G AmberGlass	X	X
3	107-SJRLA-TE	10/08/13	11:06	FW	3	1-G AmberGlass		X
4	107-SSALA-TE	10/08/13	11:35	FW	3	1-G AmberGlass		X
5	107-MSUSL-TE	10/08/13	12:10	FW	3	1-G AmberGlass		X

Correct Containers:	**Yes**	**No**	
Sample Temperature:	**Ambient**	**Cold**	**Warm**
Sample Preservative:	**Yes**	**No**	
Turnaround Time:	**STD**	**Specify:**	

Comments:

107-LBCHW-TD = Field Duplicate

CSR[1] = 2.1°C
cooler temp = 0.0°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	
Print:	Tyler Avila	**Print:**	
Organization:	CCID	**Organization:**	
DATE: 10-8-13	**TIME:** 1530	**DATE:**	**TIME:**

RECEIVED BY

Signature:	[signature]	**Signature:**	
Print:	David Hermann	**Print:**	
Organization:	PER	**Organization:**	
DATE: 10/9/13	**TIME:** 0900	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Chronic *Selenastrum*	Acute *Ceriodaphnia*									
1	108-LBCHW-TD	11/12/13	9:20	FW	5	1-G AmberGlass	X	X									
2	108-LBCHW-TE	11/12/13	9:20	FW	5	1-G AmberGlass	X	X									
3	108-SJRLA-TE	11/12/13	11:06	FW	3	1-G AmberGlass		X									
4	108-SSALA-TE	11/12/13	11:30	FW	3	1-G AmberGlass		X									
5	108-MSUSL-TE	11/12/13	12:06	FW	3	1-G AmberGlass		X									

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

108-LBCHW-TD = Field Duplicate

CSR #1 = 2.3°C
cooler temp = 0.3°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	Tyler A	**Signature:**	
Print:	Tyler Avila	**Print:**	
Organization:	ECID	**Organization:**	
DATE: 11-12-13	**TIME:** 15:25	**DATE:**	**TIME:**

RECEIVED BY

Signature:	[illegible]	**Signature:**	
Print:	David Hermens	**Print:**	
Organization:	PER	**Organization:**	
DATE: 11/13/13	**TIME:** 0900	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road,Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Chronic *Selenastrum*	Acute *Ceriodaphnia*									
1	109-LBCHW-TD	12/10/13	10:20	FW	5	1-G AmberGlass	X	X									
2	109-LBCHW-TE	12/10/13	10:20	FW	5	1-G AmberGlass	X	X									
3	109-SJRLA-TE	12/10/13	12:15	FW	3	1-G AmberGlass		X									
4	109-SSALA-TE	12/10/13	12:45	FW	3	1-G AmberGlass		X									
5	109-MSUSL-TE	12/10/13	13:25	FW	3	1-G AmberGlass		X									

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

109-LBCHW-TD = Field Duplicate

cooler = 0.0°C
temp. ~~cooler~~
control room = 1.9°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY			
Signature:	T. Avila	**Signature:**	
Print:	Tyler Avila	**Print:**	
Organization:	EcoRisk	**Organization:**	
DATE: 12-10-13	**TIME:** 16:12	**DATE:**	**TIME:**

RECEIVED BY			
Signature:	C. Ell	**Signature:**	
Print:	Candace Ellis	**Print:**	
Organization:	Pacific EcoRisk	**Organization:**	
DATE: 12/11/13	**TIME:** 0830	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Chronic *Selenastrum*	Acute *Ceriodaphnia*									
1	110-LBCHW-TD	01/14/14	9:45	FW	5	1-G AmberGlass	X	X									
2	110-LBCHW-TE	01/14/14	9:45	FW	5	1-G AmberGlass	X	X									
3	110-SJRLA-TE	01/14/14	11:10	FW	3	1-G AmberGlass		X									
4	110-SSALA-TE	01/14/14	11:35	FW	3	1-G AmberGlass		X									
5	110-MSUSL-TE	01/14/14	12:10	FW	3	1-G AmberGlass		X									

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

110-LBCHW-TD = Field Duplicate

Stored in TCR #7 @ 1.9°C 01/15/14 AF

cooler temp = 0.0°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	Tyler Av	**Signature:**	
Print:	Tyler Avila	**Print:**	
Organization:	CCID	**Organization:**	
DATE: 1-14-14	**TIME:** 15:20	**DATE:**	**TIME:**

RECEIVED BY

Signature:	[illegible]	**Signature:**	
Print:	Kevin Bowen	**Print:**	
Organization:	PER	**Organization:**	
DATE: 1/14/14	**TIME:** 1810	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Tyler Avila
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Acute *Ceriodaphnia*, Acute FHM, Chronic *Selenastrum*										
1	R14-PSAIA-TD	2-10-14	14:55	FW	5	1-G AmberGlass	X										
2	R14-LBCCC-TE		8:10	FW	5	1-G AmberGlass	X										
3	R14-NWHFR-TE		9:20	FW	5	1-G AmberGlass	X										
4	R14-LBCHW-TE		11:15	FW	5	1-G AmberGlass	X										
5	R14-TSAER-TE		11:50	FW	5	1-G AmberGlass	X										
6	R14-SJRLA-TE		12:35	FW	5	1-G AmberGlass	X										
7	R14-SSALA-TE		13:05	FW	5	1-G AmberGlass	X										
8	R14-MSUSL-TE		10:25	FW	5	1-G AmberGlass	X										
9	R14-SSASD-TE		14:00	FW	5	1-G AmberGlass	X										
10	R14-PSAIA-TE		14:55	FW	5	1-G AmberGlass	X										
11	R14-SJRSD-TE		16:15	FW	5	1-G AmberGlass	X										

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

R14-PSAIA-TD = Field Duplicate

Cooler temp 0.0

Placed in TCR#7 2.1°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	
Print:	Tyler Avila	**Print:**	
Organization:	CCID	**Organization:**	
DATE: 2-10-14	**TIME:** 18:10	**DATE:**	**TIME:**

RECEIVED BY

Signature:	[signature]	**Signature:**	
Print:	Austin Smith	**Print:**	
Organization:	PER	**Organization:**	
DATE: 2/11/14	**TIME:** 1000	**DATE:**	**TIME:**

***MATRIX CODES:** (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Pacific EcoRisk
ENVIRONMENTAL CONSULTING & TESTING
2250 Cordelia Road, Fairfield, CA 94534
(707) 270-7760 FAX (707) 207-7916

PER CHAIN-OF-CUSTODY RECORD

Client Name:	Pacific EcoRisk
Client Address:	2250 Cordelia Road Fairfield, CA 94534
Sampled By:	Craig Lipencott
Phone:	(707) 270-7760
FAX:	(707) 207-7916
Project Manager:	Stephen Clark
Project Name:	Westside San Joaquin River Watershed Coalition
PO Number:	9426

REQUESTED ANALYSIS

	Client Sample ID	Sample Date	Sample Time	Sample Matrix*	Container Number	Container Type	Acute *Ceriodaphnia*, Acute FHM, Chronic *Selenastrum*										
1	R14-VH132-TE	—	—	FW	5	1-G AmberGlass	X										
2	R14-HCARR-TE	—	—	FW	5	1-G AmberGlass	X										
3	R14-ICARR-TE	—	—	FW	5	1-G AmberGlass	X										
4	R14-WWNCR-TE	—	—	FW	5	1-G AmberGlass	X										
5	R14-DPCCR-TE	2/10/14	0900	FW	5	1-G AmberGlass	X										
6	R14-DPCHW-TE	—	—	FW	5	1-G AmberGlass	X										
7	R14-ROLFA-TE	—	—	FW	5	1-G AmberGlass	X										
8	R14-MRDRR-TE	—	—	FW	5	1-G AmberGlass	X										
9	R14-OCARR-TE	—	—	FW	5	1-G AmberGlass	X										
10	R14-OCAHW-TE	2/10/14	1400	FW	5	1-G AmberGlass	X										
11	R14-DMCDP-TE	2/10/14	1000	FW	5	1-G AmberGlass	X										
12	R14-SJRPP-TE	2/10/14	1100	FW	5	1-G AmberGlass	X										
13																	

Correct Containers:	Yes	No	
Sample Temperature:	Ambient	Cold	Warm
Sample Preservative:	Yes	No	
Turnaround Time:	STD	Specify:	

Comments:

@ Cooler Temp 0.0°C
Place in TCR#7 2.1°C

Additional volume of toxicity samples is for TIEs and dilution series testing should the triggers for these follow-up measures be met.

RELIQUINSHED BY

Signature:	[signature]	**Signature:**	
Print:	John Hansen	**Print:**	
Organization:	D.P.W.D	**Organization:**	
DATE: 2/10/14	**TIME:** 1630	**DATE:**	**TIME:**

RECEIVED BY

Signature:	[signature]	**Signature:**	
Print:	Austin Smith	**Print:**	
Organization:	PER	**Organization:**	
DATE: 2/11/14	**TIME:** 1009	**DATE:**	**TIME:**

***MATRIX CODES**: (SED = Sediment); (FW = Freshwater); (WW = Wastewater); (STRMW = Stormwater)

Appendix A
Sediment and Aquatic Toxicity Results

SJVDA Event 106 Sediment Testing Summary

Site ID	Sample Date	Test Start Date	Species	% Survival	Toxicity (Y/N)	Notes
106-HA-Control-01	N/A	9/14/2013	*Hyalella azteca*	86.3	N/A	
106-VH132-STE	9/9/2013	9/14/2013	*Hyalella azteca*	86.3	N	
106-HCARR-STE	9/9/2013	9/14/2013	*Hyalella azteca*	**0**	**Y**	
106-ICARR-STE	9/9/2013	9/14/2013	*Hyalella azteca*	**0**	**Y**	
106-WWNCR-STE	9/9/2013	9/14/2013	*Hyalella azteca*	**2.5**	**Y**	
106-DPCCR-STE	9/9/2013	9/14/2013	*Hyalella azteca*	90	N	
106-DPCHW-STE	9/9/2013	9/14/2013	*Hyalella azteca*	**58.8**	**Y**	
106-HA-Control-02	N/A	9/15/2013	*Hyalella azteca*	96.3	N/A	
106-ROLFA-STE	9/9/2013	9/15/2013	*Hyalella azteca*	93.3	N	
106-LBCCC-STE	9/9/2013	9/15/2013	*Hyalella azteca*	**80**	**Y**	
106-SSASD-STE	9/9/2013	9/15/2013	*Hyalella azteca*	97.5	N	
106-PSAIA-STE	9/9/2013	9/15/2013	*Hyalella azteca*	96.3	N	
106-PSAIA-STD	9/9/2013	9/15/2013	*Hyalella azteca*	93.8	N	RPD = 2.6%

SJVDA Event 106 Toxicity Testing Summary (samples collected 9/10/13)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
106-SC-LWControl-01	N/A	9/11/2013	*Selenastrum capricornutum*		3.44	N/A	N/A	
106-LBCHW-TE	9/10/2013	9/11/2013	*Selenastrum capricornutum*		4.65	217	N	
106-LBCHW-TD	9/10/2013	9/11/2013	*Selenastrum capricornutum*		4.36	204	N	RPD = 6.4%
106-CD-LWControl-01	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	100			N/A	
106-LBCHW-TE	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	95			N	
106-SJRLA-TE	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	100			N	
106-SSALA-TE	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	100			N	
106-MSUSL-TE	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	95			N	
106-LBCHW-TD	9/10/2013	9/11/2013	*Ceriodaphnia dubia*	95			N	RPD = 0%

SJVDA Event 107 Toxicity Testing Summary (samples collected 10/8/13)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
107-SC-LWControl-01	N/A	10/9/2013	*Selenastrum capricornutum*		2.36	N/A	N/A	
107-LBCHW-TE	10/8/2013	10/9/2013	*Selenastrum capricornutum*		7.46	316	N	
107-LBCHW-TD	10/8/2013	10/9/2013	*Selenastrum capricornutum*		8.32	353	N	RPD = 10.9%
107-CD-LWControl-01	N/A	10/9/2013	*Ceriodaphnia dubia*	100			N/A	
107-LBCHW-TE	10/8/2013	10/9/2013	*Ceriodaphnia dubia*	100			N	
107-SJRLA-TE	10/8/2013	10/9/2013	*Ceriodaphnia dubia*	100			N	
107-SSALA-TE	10/8/2013	10/9/2013	*Ceriodaphnia dubia*	95			N	
107-MSUSL-TE	10/8/2013	10/9/2013	*Ceriodaphnia dubia*	100			N	
107-LBCHW-TD	10/8/2013	10/9/2013	*Ceriodaphnia dubia*	100			N	RPD = 0%

SJVDA Event 108 Toxicity Testing Summary (samples collected 11/12/13)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
108-SC-LWControl-01	N/A	11/13/2013	*Selenastrum capricornutum*		3.21	N/A	N/A	
108-LBCHW-TE	11/12/2013	11/13/2013	*Selenastrum capricornutum*		6.65	207	N	
108-LBCHW-TD	11/12/2013	11/13/2013	*Selenastrum capricornutum*		6.63	207	N	RPD = 0.3%
108-CD-LWControl-01	N/A	11/13/2013	*Ceriodaphnia dubia*	95			N/A	
108-LBCHW-TE	11/12/2013	11/13/2013	*Ceriodaphnia dubia*	100			N	
108-SJRLA-TE	11/12/2013	11/13/2013	*Ceriodaphnia dubia*	100			N	
108-SSALA-TE	11/12/2013	11/13/2013	*Ceriodaphnia dubia*	100			N	
108-MSUSL-TE	11/12/2013	11/13/2013	*Ceriodaphnia dubia*	100			N	
108-LBCHW-TD	11/12/2013	11/13/2013	*Ceriodaphnia dubia*	100			N	RPD = 0%

SJVDA Event 109 Toxicity Testing Summary (samples collected 12/10/13)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
109-SC-LWControl-01	N/A	12/11/2013	*Selenastrum capricornutum*		3.71	N/A	N/A	
109-LBCHW-TE	12/10/2013	12/11/2013	*Selenastrum capricornutum*		4.67	126	N	
109-LBCHW-TD	12/10/2013	12/11/2013	*Selenastrum capricornutum*		6.75	182	N	RPD = 36.4%. RPD >25%. As per QAPP and client communication, samples retested on 12/18.
109-SC-LWControl-02	N/A	12/18/2014	*Selenastrum capricornutum*		3.50	N/A	N/A	
109-LBCHW-TE	12/10/2013	12/18/2014	*Selenastrum capricornutum*		2.84	81	N	
109-LBCHW-TD	12/10/2013	12/18/2014	*Selenastrum capricornutum*		3.45	99	N	RPD = 19.4%
109-CD-LWControl-01	N/A	12/11/2013	*Ceriodaphnia dubia*	95			N/A	
109-LBCHW-TE	12/10/2013	12/11/2013	*Ceriodaphnia dubia*	100			N	
109-SJRLA-TE	12/10/2013	12/11/2013	*Ceriodaphnia dubia*	100			N	
109-SSALA-TE	12/10/2013	12/11/2013	*Ceriodaphnia dubia*	100			N	
109-MSUSL-TE	12/10/2013	12/11/2013	*Ceriodaphnia dubia*	100			N	
109-LBCHW-TD	12/10/2013	12/11/2013	*Ceriodaphnia dubia*	100			N	RPD = 0%

SJVDA Event 110 Toxicity Testing Summary (samples collected 1/14/14)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
110-SC-LWControl-01	N/A	1/15/2014	*Selenastrum capricornutum*		1.54	N/A	N/A	
110-SC-ConductivityControl-01	N/A	1/15/2014	*Selenastrum capricornutum*		2.93	190.3	N/A	Lab Water conductivity adjusted to conductivity of LBCHW sample at receipt.
110-LBCHW-TE	1/14/2014	1/15/2014	*Selenastrum capricornutum*		6.93	450	N	
110-LBCHW-TD	1/14/2014	1/15/2014	*Selenastrum capricornutum*		6.84	444	N	RPD = 1.3%
110-CD-LWControl-01	NA	1/15/2014	*Ceriodaphnia dubia*	100			N/A	
110-CD-ConductivityControl-01	N/A	1/15/2014	*Ceriodaphnia dubia*	85			N/A	Lab Water conductivity adjusted to conductivity of LBCHW sample at receipt.
110-LBCHW-TE	1/14/2014	1/15/2014	*Ceriodaphnia dubia*	90			N	
110-SJRLA-TE	1/14/2014	1/15/2014	*Ceriodaphnia dubia*	95			N	
110-SSALA-TE	1/14/2014	1/15/2014	*Ceriodaphnia dubia*	100			N	
110-MSUSL-TE	1/14/2014	1/15/2014	*Ceriodaphnia dubia*	95			N	
110-LBCHW-TD	1/14/2014	1/15/2014	*Ceriodaphnia dubia*	95			N	RPD = 5.4%

SJVDA Event R14 Toxicity Testing Summary (samples collected 2/10/14)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
R14-SC-LWControl-01	N/A	2/11/2014	*Selenastrum capricornutum*		2.27	N/A	N/A	
R14-LBCCC-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		6.68	294	N	
R14-NWHFR-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		7.62	336	N	
R14-LBCHW-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		7.10	313	N	
R14-TSAER-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		6.15	271	N	
R14-SJRLA-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		4.85	214	N	
R14-SC-LWControl-02	N/A	2/11/2014	*Selenastrum capricornutum*		2.51	N/A	N/A	
R14-SSALA-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		5.05	201	N	
R14-MSUSL-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		6.93	276	N	
R14-SSASD-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		**1.08**	43	**Y**	TIE performed
R14-PSAIA-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		5.06	202	N	
R14-PSAIA-TD	2/10/2014	2/11/2014	*Selenastrum capricornutum*		5.43	216	N	RPD = 7.1%
R14-SC-LWControl-03	N/A	2/11/2014	*Selenastrum capricornutum*		2.46	N/A	N/A	
R14-SJRSD-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		6.15	250	N	
R14-DPCCR-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		2.76	112	N	
R14-OCAHW-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		5.25	213	N	
R14-DMCDP-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		5.25	213	N	
R14-SJRPP-TE	2/10/2014	2/11/2014	*Selenastrum capricornutum*		6.59	268	N	

SJVDA Event R14 Toxicity Testing Summary (samples collected 2/10/14)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
R14-CD-LWControl-01	N/A	2/11/2014	*Ceriodaphnia dubia*	100			N/A	
R14-LBCCC-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-NWHFR-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-LBCHW-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-TSAER-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-SJRLA-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-CD-LWControl-02	N/A	2/11/2014	*Ceriodaphnia dubia*	100			N/A	
R14-SSALA-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-MSUSL-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-SSASD-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-PSAIA-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-PSAIA-TD	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	RPD = 0%
R14-CD-LWControl-03	N/A	2/11/2014	*Ceriodaphnia dubia*	100			N/A	
R14-SJRSD-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-DPCCR-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-OCAHW-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-DMCDP-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	
R14-SJRPP-TE	2/10/2014	2/11/2014	*Ceriodaphnia dubia*	100			N	

SJVDA Event R14 Toxicity Testing Summary (samples collected 2/10/14)

Site ID	Sample Date	Test Start Date	Species	% Survival	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
R14-PP-LWControl-01	N/A	2/11/2014	*Pimephales promelas*	100			N/A	
R14-LBCCC-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-NWHFR-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-LBCHW-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-TSAER-TE	2/10/2014	2/11/2014	*Pimephales promelas*	97.5			N	
R14-SJRLA-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-PP-LWControl-02	N/A	2/11/2014	*Pimephales promelas*	97.5			N/A	
R14-SSALA-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-MSUSL-TE	2/10/2014	2/11/2014	*Pimephales promelas*	97.5			N	
R14-SSASD-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-PSAIA-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-PSAIA-TD	2/10/2014	2/11/2014	*Pimephales promelas*	95			N	RPD = 5.1%
R14-PP-LWControl-03	N/A	2/11/2014	*Pimephales promelas*	97.5			N/A	
R14-SJRSD-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-DPCCR-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-OCAHW-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-DMCDP-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	
R14-SJRPP-TE	2/10/2014	2/11/2014	*Pimephales promelas*	100			N	

SJVDA Event R14 Acute Selenastrum Targeted Phase I Toxicity Identification Evaluation for Sample R14-SSASD-TE

Sample/Treatment ID	Treatment	Species	Cell Growth (cells/mL x 10^6)	% of Control	Toxicity (Y/N)	Notes
R14-SC-LWControl-04	Lab water control	*Selenastrum capricornutum*	1.30	N/A	N/A	There was no blank interference present in the TIE treatments. The toxicity was not persistent in the ambient water sample. As a result, identification of the contaminant classes responsible for the toxicity in the initial test is not possible.
R14-SC-TIE-Blank-01	C18 SPE blank	*Selenastrum capricornutum*	1.74	134	N	
R14-SC-TIE-Blank-02	LC-WCX blank	*Selenastrum capricornutum*	1.54	118	N	
R14-SSASD-TE	100% Baseline sample	*Selenastrum capricornutum*	1.99	153	N	
R14-SSASD-TE	C18 SPE sample	*Selenastrum capricornutum*	4.12	317	N	
R14-SSASD-TE	LC-WCX sample	*Selenastrum capricornutum*	1.64	126	N	

Appendix A
Data Summary

Westside San Joaquin River Watershed Coalition

Field Data Summary by Constituent

Monitoring Site: **Blewett Drain at Highway 132**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	4.56	mg/l		E
DO	Field Data	9/10/2013	106	5.13	mg/l		E
DO	Field Data	10/8/2013	107	5.15	mg/l		E
DO	Field Data	1/14/2014	110	6.13	mg/l		E
EC	Field Data	9/9/2013	106	912	µmhos/cm		E
EC	Field Data	9/10/2013	106	890	µmhos/cm		E
EC	Field Data	10/8/2013	107	850	µmhos/cm		E
EC	Field Data	1/14/2014	110	780	µmhos/cm		E
Est Depth	Field Data	9/10/2013	106	2	ft		E
Est Depth	Field Data	10/8/2013	107	0.56	ft		E
Est Depth	Field Data	1/14/2014	110	1.17	ft		E
Flow	Field Data	9/9/2013	106	3	cfs		E
Flow	Field Data	9/10/2013	106	10.8	cfs		E
Flow	Field Data	10/8/2013	107	1.51	cfs		E
Flow	Field Data	11/12/2013	108	0	cfs		E
Flow	Field Data	12/10/2013	109	0	cfs		E
Flow	Field Data	1/14/2014	110	4.05	cfs		E
pH	Field Data	9/9/2013	106	7.88			E
pH	Field Data	9/10/2013	106	7.95			E
pH	Field Data	10/8/2013	107	7.61			E
pH	Field Data	1/14/2014	110	7.65			E
Temp	Field Data	9/9/2013	106	23.37	c		E
Temp	Field Data	9/10/2013	106	23.25	c		E
Temp	Field Data	10/8/2013	107	18.5	c		E
Temp	Field Data	1/14/2014	110	10	c		E

Monitoring Site: **Del Puerto Creek at Hwy 33**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.71	mg/l		E
EC	Field Data	9/9/2013	106	1771	µmhos/cm		E
Flow	Field Data	9/9/2013	106	0.55	cfs		E
pH	Field Data	9/9/2013	106	7.85			E
Temp	Field Data	9/9/2013	106	23.56	c		E

Monitoring Site: **Del Puerto Creek near Cox Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.14	mg/l		E

DO	Field Data	9/10/2013	106	5.86	mg/l	E
DO	Field Data	10/8/2013	107	6.13	mg/l	E
DO	Field Data	11/12/2013	108	6.53	mg/l	E
DO	Field Data	12/10/2013	109	6.13	mg/l	E
DO	Field Data	1/14/2014	110	5.98	mg/l	E
DO	Field Data	2/10/2014	R14	5.51	mg/l	E
EC	Field Data	9/9/2013	106	1838	µmhos/cm	E
EC	Field Data	9/10/2013	106	1600	µmhos/cm	E
EC	Field Data	10/8/2013	107	1400	µmhos/cm	E
EC	Field Data	11/12/2013	108	957	µmhos/cm	E
EC	Field Data	12/10/2013	109	847	µmhos/cm	E
EC	Field Data	1/14/2014	110	1088	µmhos/cm	E
EC	Field Data	2/10/2014	R14	1242	µmhos/cm	E
Est Depth	Field Data	9/9/2013	106	2	ft	E
Est Depth	Field Data	9/10/2013	106	2	ft	E
Est Depth	Field Data	11/12/2013	108	1.5	ft	E
Est Depth	Field Data	12/10/2013	109	1	ft	E
Est Depth	Field Data	1/14/2014	110	1.5	ft	E
Est Depth	Field Data	2/10/2014	R14	3	ft	E
Flow	Field Data	9/9/2013	106	3	cfs	E
Flow	Field Data	9/10/2013	106	18	cfs	E
Flow	Field Data	10/8/2013	107	3	cfs	E
Flow	Field Data	11/12/2013	108	5	cfs	E
Flow	Field Data	12/10/2013	109	3	cfs	E
Flow	Field Data	1/14/2014	110	24.3	cfs	E
Flow	Field Data	2/10/2014	R14	0	cfs	E
pH	Field Data	9/9/2013	106	7.51		E
pH	Field Data	9/10/2013	106	7.21		E
pH	Field Data	10/8/2013	107	7.88		E
pH	Field Data	11/12/2013	108	8.44		E
pH	Field Data	12/10/2013	109	8.75		E
pH	Field Data	1/14/2014	110	8.82		E
pH	Field Data	2/10/2014	R14	8		E
Staff Gage	Field Data	11/12/2013	108	0	ft	E
Staff Gage	Field Data	12/10/2013	109	0	ft	E
Temp	Field Data	9/9/2013	106	22.36	c	E
Temp	Field Data	9/10/2013	106	22.35	c	E
Temp	Field Data	10/8/2013	107	18.75	c	E
Temp	Field Data	11/12/2013	108	12	c	E

Temp	Field Data	12/10/2013	109	8	c		E
Temp	Field Data	1/14/2014	110	9.5	c		E
Temp	Field Data	2/10/2014	R14	12	c		E

Monitoring Site: **Delta Mendota Canal at DPWD**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	6.43	mg/l		E
DO	Field Data	10/8/2013	107	6.8	mg/l		E
DO	Field Data	11/12/2013	108	6.78	mg/l		E
DO	Field Data	12/10/2013	109	7.13	mg/l		E
DO	Field Data	1/14/2014	110	7.15	mg/l		E
EC	Field Data	9/10/2013	106	780	µmhos/cm		E
EC	Field Data	10/8/2013	107	795	µmhos/cm		E
EC	Field Data	11/12/2013	108	565	µmhos/cm		E
EC	Field Data	12/10/2013	109	604	µmhos/cm		E
EC	Field Data	1/14/2014	110	668	µmhos/cm		E
EC	Field Data	2/10/2014	R14	838	µmhos/cm		E
Est Depth	Field Data	11/12/2013	108	0	ft		E
Est Depth	Field Data	12/10/2013	109	20	ft		E
Est Depth	Field Data	1/14/2014	110	20	ft		E
pH	Field Data	9/10/2013	106	7.85			E
pH	Field Data	10/8/2013	107	7.71			E
pH	Field Data	11/12/2013	108	7.26			E
pH	Field Data	12/10/2013	109	8.3			E
pH	Field Data	1/14/2014	110	8.36			E
pH	Field Data	2/10/2014	R14	8.05			E
Staff Gage	Field Data	11/12/2013	108	0	ft		E
Temp	Field Data	9/10/2013	106	20.26	c		E
Temp	Field Data	10/8/2013	107	19.5	c		E
Temp	Field Data	11/12/2013	108	17	c		E
Temp	Field Data	12/10/2013	109	10	c		E
Temp	Field Data	1/14/2014	110	10	c		E
Temp	Field Data	2/10/2014	R14	11	c		E

Monitoring Site: **Hospital Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	6.13	mg/l		E
EC	Field Data	9/10/2013	106	1694	µmhos/cm		E
Flow	Field Data	9/10/2013	106	0.6	cfs		E

pH	Field Data	9/10/2013	106	7.95			E
Staff Gage	Field Data	9/10/2013	106	0.17	ft		E
Temp	Field Data	9/10/2013	106	22.35	c		E

Monitoring Site: **Ingram Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.45	mg/l		E
DO	Field Data	9/10/2013	106	7.18	mg/l		E
DO	Field Data	10/8/2013	107	6.15	mg/l		E
EC	Field Data	9/9/2013	106	1670	µmhos/cm		E
EC	Field Data	9/10/2013	106	1400	µmhos/cm		E
EC	Field Data	10/8/2013	107	1570	µmhos/cm		E
Est Depth	Field Data	9/9/2013	106	2	ft		E
Est Depth	Field Data	10/8/2013	107	1	ft		E
Flow	Field Data	9/9/2013	106	5.6	cfs		E
Flow	Field Data	9/10/2013	106	10.5	cfs		E
Flow	Field Data	10/8/2013	107	2.9	cfs		E
Flow	Field Data	12/10/2013	109	0	cfs		E
pH	Field Data	9/9/2013	106	7.75			E
pH	Field Data	9/10/2013	106	7.99			E
pH	Field Data	10/8/2013	107	7.98			E
Staff Gage	Field Data	9/9/2013	106	0.31	ft		E
Staff Gage	Field Data	9/10/2013	106	0.47	ft		E
Staff Gage	Field Data	10/8/2013	107	0.2	ft		E
Temp	Field Data	9/9/2013	106	23.41	c		E
Temp	Field Data	9/10/2013	106	22.2	c		E
Temp	Field Data	10/8/2013	107	18.4	c		E

Monitoring Site: **Los Banos Creek at China Camp Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	1.77	mg/l		E
DO	Field Data	9/10/2013	106	5.7	mg/l		E
DO	Field Data	10/8/2013	107	8.24	mg/l		E
DO	Field Data	11/12/2013	108	4.3	mg/l		E
DO	Field Data	12/10/2013	109	9.58	mg/l		E
DO	Field Data	1/14/2014	110	8.9	mg/l		E
DO	Field Data	2/10/2014	R14	7.43	mg/l		E
EC	Field Data	9/9/2013	106	1702	µmhos/cm		E
EC	Field Data	9/10/2013	106	1298	µmhos/cm		E

EC	Field Data	10/8/2013	107	833	µmhos/cm		E
EC	Field Data	11/12/2013	108	796	µmhos/cm		E
EC	Field Data	12/10/2013	109	549	µmhos/cm		E
EC	Field Data	1/14/2014	110	1460	µmhos/cm		E
EC	Field Data	2/10/2014	R14	2576	µmhos/cm		E
Est Depth	Field Data	9/10/2013	106	2.76	ft		E
Est Depth	Field Data	11/12/2013	108	2.4	ft		E
Est Depth	Field Data	12/10/2013	109	2.3	ft		E
Est Depth	Field Data	1/14/2014	110	0.95	ft		E
Est Depth	Field Data	2/10/2014	R14	2.01	ft		E
Flow	Field Data	9/9/2013	106	0	cfs		E
Flow	Field Data	9/10/2013	106	0	cfs		E
Flow	Field Data	10/8/2013	107	40	cfs		E
Flow	Field Data	11/12/2013	108	15	cfs		E
Flow	Field Data	12/10/2013	109	15	cfs		E
pH	Field Data	9/9/2013	106	7.84			E
pH	Field Data	9/10/2013	106	8.63			E
pH	Field Data	10/8/2013	107	7.66			E
pH	Field Data	11/12/2013	108	7.78			E
pH	Field Data	12/10/2013	109	5.04			E
pH	Field Data	1/14/2014	110	8.09			E
pH	Field Data	2/10/2014	R14	8.34			E
Staff Gage	Field Data	9/10/2013	106	1.85	ft		E
Staff Gage	Field Data	11/12/2013	108	1.5	ft		E
Staff Gage	Field Data	12/10/2013	109	1.4	ft		E
Staff Gage	Field Data	1/14/2014	110	0.04	ft		E
Staff Gage	Field Data	2/10/2014	R14	1.1	ft		E
Temp	Field Data	9/9/2013	106	23.78	c		E
Temp	Field Data	9/10/2013	106	21.04	c		E
Temp	Field Data	10/8/2013	107	17.4	c		E
Temp	Field Data	11/12/2013	108	14.01	c		E
Temp	Field Data	12/10/2013	109	5.06	c		E
Temp	Field Data	1/14/2014	110	2.97	c		E
Temp	Field Data	2/10/2014	R14	13.47	c		E

Monitoring Site: **Los Banos Creek at Hwy 140**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	5.98	mg/l		E
DO	Field Data	10/8/2013	107	6.9	mg/l		E

DO	Field Data	11/12/2013	108	7.23	mg/l	E
DO	Field Data	12/10/2013	109	7.6	mg/l	E
DO	Field Data	1/14/2014	110	7.53	mg/l	E
DO	Field Data	2/10/2014	R14	11.5	mg/l	E
EC	Field Data	9/10/2013	106	977	µmhos/cm	E
EC	Field Data	10/8/2013	107	912	µmhos/cm	E
EC	Field Data	11/12/2013	108	1262	µmhos/cm	E
EC	Field Data	12/10/2013	109	1353	µmhos/cm	E
EC	Field Data	1/14/2014	110	4017	µmhos/cm	E
EC	Field Data	2/10/2014	R14	2136	µmhos/cm	E
Est Depth	Field Data	9/10/2013	106	2	ft	E
Est Depth	Field Data	10/8/2013	107	1.6	ft	E
Est Depth	Field Data	11/12/2013	108	1.9	ft	E
Est Depth	Field Data	12/10/2013	109	3.37	ft	E
Est Depth	Field Data	1/14/2014	110	2.8	ft	E
Est Depth	Field Data	2/10/2014	R14	2.54	ft	E
Flow	Field Data	9/10/2013	106	55.08	cfs	E
Flow	Field Data	10/8/2013	107	36.29	cfs	E
Flow	Field Data	11/12/2013	108	20	cfs	E
Flow	Field Data	12/10/2013	109	14	cfs	E
Flow	Field Data	1/14/2014	110	52.2	cfs	E
Flow	Field Data	2/10/2014	R14	39.1	cfs	E
pH	Field Data	9/10/2013	106	7.56		E
pH	Field Data	10/8/2013	107	7.48		E
pH	Field Data	11/12/2013	108	7.54		E
pH	Field Data	12/10/2013	109	7.67		E
pH	Field Data	1/14/2014	110	7.66		E
pH	Field Data	2/10/2014	R14	7.91		E
Staff Gage	Field Data	12/10/2013	109	1.57	ft	E
Staff Gage	Field Data	1/14/2014	110	1	ft	E
Staff Gage	Field Data	2/10/2014	R14	0.74	ft	E
Temp	Field Data	9/10/2013	106	21.72	c	E
Temp	Field Data	10/8/2013	107	15.63	c	E
Temp	Field Data	11/12/2013	108	13.94	c	E
Temp	Field Data	12/10/2013	109	5.18	c	E
Temp	Field Data	1/14/2014	110	7.7	c	E
Temp	Field Data	2/10/2014	R14	14.36	c	E

Westside San Joaquin River Watershed Coalition

Field Data Summary by Constituent

Monitoring Site: **Marshall Road Drain near River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	5.99	mg/l		E
DO	Field Data	10/8/2013	107	5.05	mg/l		E
DO	Field Data	11/12/2013	108	5.31	mg/l		E
DO	Field Data	12/10/2013	109	5.31	mg/l		E
DO	Field Data	1/14/2014	110	6.05	mg/l		E
EC	Field Data	9/10/2013	106	980	µmhos/cm		E
EC	Field Data	10/8/2013	107	900	µmhos/cm		E
EC	Field Data	11/12/2013	108	1074	µmhos/cm		E
EC	Field Data	12/10/2013	109	909	µmhos/cm		E
EC	Field Data	1/14/2014	110	1158	µmhos/cm		E
Est Depth	Field Data	11/12/2013	108	0.1	ft		E
Est Depth	Field Data	12/10/2013	109	0.5	ft		E
Flow	Field Data	12/10/2013	109	120	cfs		E
pH	Field Data	9/10/2013	106	8.1			E
pH	Field Data	10/8/2013	107	7.8			E
pH	Field Data	11/12/2013	108	8.49			E
pH	Field Data	12/10/2013	109	8.63			E
pH	Field Data	1/14/2014	110	8.64			E
Staff Gage	Field Data	11/12/2013	108	0	ft		E
Staff Gage	Field Data	12/10/2013	109	0	ft		E
Temp	Field Data	9/10/2013	106	22.75	c		E
Temp	Field Data	10/8/2013	107	17.98	c		E
Temp	Field Data	11/12/2013	108	14	c		E
Temp	Field Data	12/10/2013	109	9	c		E
Temp	Field Data	1/14/2014	110	10	c		E

Monitoring Site: **Mud Slough Upstream of San Luis Drain**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	7.15	mg/l		E
DO	Field Data	10/8/2013	107	6.19	mg/l		E
DO	Field Data	11/12/2013	108	6.88	mg/l		E
DO	Field Data	12/10/2013	109	7.24	mg/l		E
DO	Field Data	1/14/2014	110	10.2	mg/l		E
DO	Field Data	2/10/2014	R14	5.24	mg/l		E
EC	Field Data	9/10/2013	106	835	µmhos/cm		E
EC	Field Data	10/8/2013	107	1157	µmhos/cm		E

EC	Field Data	11/12/2013	108	1625	µmhos/cm		E
EC	Field Data	12/10/2013	109	1803	µmhos/cm		E
EC	Field Data	1/14/2014	110	2481	µmhos/cm		E
EC	Field Data	2/10/2014	R14	2869	µmhos/cm		E
Est Depth	Field Data	9/10/2013	106	1.97	ft		E
Est Depth	Field Data	10/8/2013	107	2.7	ft		E
Est Depth	Field Data	11/12/2013	108	2.9	ft		E
Est Depth	Field Data	12/10/2013	109	3	ft		E
Est Depth	Field Data	1/14/2014	110	2.3	ft		E
Flow	Field Data	9/10/2013	106	37	cfs		E
Flow	Field Data	10/8/2013	107	96	cfs		E
Flow	Field Data	11/12/2013	108	110	cfs		E
Flow	Field Data	12/10/2013	109	33	cfs		E
Flow	Field Data	1/14/2014	110	71	cfs		E
Flow	Field Data	2/10/2014	R14	155	cfs		E
pH	Field Data	9/10/2013	106	8			E
pH	Field Data	10/8/2013	107	7.64			E
pH	Field Data	11/12/2013	108	7.63			E
pH	Field Data	12/10/2013	109	7.81			E
pH	Field Data	1/14/2014	110	7.99			E
pH	Field Data	2/10/2014	R14	7.74			E
Staff Gage	Field Data	9/10/2013	106	1	ft		E
Staff Gage	Field Data	10/8/2013	107	1.7	ft		E
Staff Gage	Field Data	11/12/2013	108	1.9	ft		E
Staff Gage	Field Data	12/10/2013	109	3	ft		E
Staff Gage	Field Data	1/14/2014	110	1.3	ft		E
Staff Gage	Field Data	2/10/2014	R14	2.04	ft		E
Temp	Field Data	9/10/2013	106	26.24	c		E
Temp	Field Data	10/8/2013	107	18.89	c		E
Temp	Field Data	11/12/2013	108	15.56	c		E
Temp	Field Data	12/10/2013	109	6.06	c		E
Temp	Field Data	1/14/2014	110	11.23	c		E
Temp	Field Data	2/10/2014	R14	14.26	c		E

Monitoring Site: **Newman Wasteway near Hills Ferry Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	10/8/2013	107	5.68	mg/l		E
DO	Field Data	11/12/2013	108	6.21	mg/l		E
DO	Field Data	11/12/2013	108	6.4	mg/l		E

DO	Field Data	12/10/2013	109	8	mg/l		E
DO	Field Data	1/14/2014	110	3.05	mg/l		E
DO	Field Data	2/10/2014	R14	1.42	mg/l		E
EC	Field Data	10/8/2013	107	1454	µmhos/cm		E
EC	Field Data	11/12/2013	108	2009	µmhos/cm		E
EC	Field Data	12/10/2013	109	1939	µmhos/cm		E
EC	Field Data	1/14/2014	110	1924	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1675	µmhos/cm		E
Est Depth	Field Data	10/8/2013	107	1.6	ft		E
Est Depth	Field Data	11/12/2013	108	0	ft		E
Est Depth	Field Data	12/10/2013	109	2	ft		E
Est Depth	Field Data	1/14/2014	110	1.5	ft		E
Est Depth	Field Data	2/10/2014	R14	1.7	ft		E
Flow	Field Data	10/8/2013	107	356.4	cfs		E
Flow	Field Data	11/12/2013	108	210	cfs		E
Flow	Field Data	12/10/2013	109	225	cfs		E
Flow	Field Data	1/14/2014	110	261.2	cfs		E
Flow	Field Data	2/10/2014	R14	0	cfs		E
pH	Field Data	10/8/2013	107	7.28			E
pH	Field Data	11/12/2013	108	7.45			E
pH	Field Data	12/10/2013	109	7.62			E
pH	Field Data	1/14/2014	110	7.49			E
pH	Field Data	2/10/2014	R14	7.12			E
Temp	Field Data	10/8/2013	107	14.21	c		E
Temp	Field Data	11/12/2013	108	11.1	c		E
Temp	Field Data	12/10/2013	109	3.74	c		E
Temp	Field Data	1/14/2014	110	5.9	c		E
Temp	Field Data	2/10/2014	R14	12.41	c		E

Monitoring Site: **Orestimba Creek at Hwy 33**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.1	mg/l		E
EC	Field Data	9/9/2013	106	1700	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1019	µmhos/cm		E
Est Depth	Field Data	2/10/2014	R14	3.42	ft		E
Flow	Field Data	9/9/2013	106	0.55	cfs		E
Flow	Field Data	2/10/2014	R14	0	cfs		E
pH	Field Data	9/9/2013	106	7.99			E
pH	Field Data	2/10/2014	R14	8.2			E

Temp	Field Data	9/9/2013	106	24.35	c		E
Temp	Field Data	2/10/2014	R14	12	c		E

Monitoring Site: **Orestimba Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	10/8/2013	107	6.13	mg/l		E
EC	Field Data	10/8/2013	107	1400	µmhos/cm		E
Est Depth	Field Data	10/8/2013	107	1	ft		E
Flow	Field Data	10/8/2013	107	0	cfs		E
Flow	Field Data	11/12/2013	108	0	cfs		E
Flow	Field Data	12/10/2013	109	0	cfs		E
pH	Field Data	10/8/2013	107	7.75			E
Temp	Field Data	10/8/2013	107	18.85	c		E

Monitoring Site: **Poso Slough at Indiana Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	6.88	mg/l		E
DO	Field Data	9/10/2013	106	6.67	mg/l		E
DO	Field Data	10/8/2013	107	9.44	mg/l		E
DO	Field Data	11/12/2013	108	10.18	mg/l		E
DO	Field Data	12/10/2013	109	16.76	mg/l		E
DO	Field Data	1/14/2014	110	17.99	mg/l		E
DO	Field Data	2/10/2014	R14	11.16	mg/l		E
EC	Field Data	9/9/2013	106	1269	µmhos/cm		E
EC	Field Data	9/10/2013	106	1141	µmhos/cm		E
EC	Field Data	10/8/2013	107	1532	µmhos/cm		E
EC	Field Data	11/12/2013	108	1263	µmhos/cm		E
EC	Field Data	12/10/2013	109	1774	µmhos/cm		E
EC	Field Data	1/14/2014	110	1538	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1028	µmhos/cm		E
Est Depth	Field Data	9/9/2013	106	1.75	ft		E
Est Depth	Field Data	9/10/2013	106	1.6	ft		E
Est Depth	Field Data	10/8/2013	107	1.5	ft		E
Est Depth	Field Data	11/12/2013	108	1.3	ft		E
Est Depth	Field Data	12/10/2013	109	0.04	ft		E
Est Depth	Field Data	1/14/2014	110	0.07	ft		E
Est Depth	Field Data	2/10/2014	R14	0.07	ft		E
Flow	Field Data	9/9/2013	106	14	cfs		E
Flow	Field Data	9/10/2013	106	14	cfs		E

Flow	Field Data	11/12/2013	108	9	cfs		E
Flow	Field Data	12/10/2013	109	0	cfs		E
Flow	Field Data	2/10/2014	R14	0	cfs		E
pH	Field Data	9/9/2013	106	7.72			E
pH	Field Data	9/10/2013	106	7.81			E
pH	Field Data	10/8/2013	107	8.18			E
pH	Field Data	11/12/2013	108	8.29			E
pH	Field Data	12/10/2013	109	8.33			E
pH	Field Data	1/14/2014	110	8.05			E
pH	Field Data	2/10/2014	R14	9.17			E
Temp	Field Data	9/9/2013	106	25.8	c		E
Temp	Field Data	9/10/2013	106	25.71	c		E
Temp	Field Data	10/8/2013	107	19.63	c		E
Temp	Field Data	11/12/2013	108	15.56	c		E
Temp	Field Data	12/10/2013	109	10.56	c		E
Temp	Field Data	1/14/2014	110	9.61	c		E
Temp	Field Data	2/10/2014	R14	18.85	c		E

Monitoring Site: **Ramona Lake near Fig Avenue**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.1	mg/l		E
DO	Field Data	9/10/2013	106	5.1	mg/l		E
DO	Field Data	10/8/2013	107	5.21	mg/l		E
DO	Field Data	11/12/2013	108	5.13	mg/l		E
DO	Field Data	12/10/2013	109	5.25	mg/l		E
DO	Field Data	1/14/2014	110	5.01	mg/l		E
EC	Field Data	9/9/2013	106	2221	µmhos/cm		E
EC	Field Data	9/10/2013	106	2150	µmhos/cm		E
EC	Field Data	10/8/2013	107	1900	µmhos/cm		E
EC	Field Data	11/12/2013	108	1281	µmhos/cm		E
EC	Field Data	12/10/2013	109	1039	µmhos/cm		E
EC	Field Data	1/14/2014	110	1248	µmhos/cm		E
Est Depth	Field Data	11/12/2013	108	1	ft		E
Est Depth	Field Data	12/10/2013	109	0.5	ft		E
Est Depth	Field Data	1/14/2014	110	1.5	ft		E
Flow	Field Data	11/12/2013	108	0	cfs		E
Flow	Field Data	12/10/2013	109	0	cfs		E
pH	Field Data	9/9/2013	106	7.99			E
pH	Field Data	9/10/2013	106	7.95			E

pH	Field Data	10/8/2013	107	7.98			E
pH	Field Data	11/12/2013	108	9.82			E
pH	Field Data	12/10/2013	109	9.58			E
pH	Field Data	1/14/2014	110	8.71			E
Staff Gage	Field Data	11/12/2013	108	0	ft		E
Staff Gage	Field Data	12/10/2013	109	0	ft		E
Temp	Field Data	9/9/2013	106	24.3	c		E
Temp	Field Data	9/10/2013	106	24.61	c		E
Temp	Field Data	10/8/2013	107	20.05	c		E
Temp	Field Data	11/12/2013	108	18	c		E
Temp	Field Data	12/10/2013	109	10	c		E
Temp	Field Data	1/14/2014	110	11	c		E

Monitoring Site: **Salt Slough at Lander Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	6.7	mg/l		E
DO	Field Data	10/8/2013	107	8.59	mg/l		E
DO	Field Data	11/12/2013	108	8.49	mg/l		E
DO	Field Data	12/10/2013	109	7.32	mg/l		E
DO	Field Data	1/14/2014	110	10.58	mg/l		E
DO	Field Data	2/10/2014	R14	9.16	mg/l		E
EC	Field Data	9/10/2013	106	1076	µmhos/cm		E
EC	Field Data	10/8/2013	107	1376	µmhos/cm		E
EC	Field Data	11/12/2013	108	1316	µmhos/cm		E
EC	Field Data	12/10/2013	109	1444	µmhos/cm		E
EC	Field Data	1/14/2014	110	1713	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1868	µmhos/cm		E
Est Depth	Field Data	9/10/2013	106	5.5	ft		E
Est Depth	Field Data	10/8/2013	107	5.45	ft		E
Est Depth	Field Data	11/12/2013	108	3.2	ft		E
Est Depth	Field Data	12/10/2013	109	3.14	ft		E
Est Depth	Field Data	1/14/2014	110	2.6	ft		E
Est Depth	Field Data	2/10/2014	R14	3.04	ft		E
Flow	Field Data	9/10/2013	106	123	cfs		E
Flow	Field Data	10/8/2013	107	114	cfs		E
Flow	Field Data	11/12/2013	108	161	cfs		E
Flow	Field Data	12/10/2013	109	147	cfs		E
Flow	Field Data	1/14/2014	110	113	cfs		E
Flow	Field Data	2/10/2014	R14	132	cfs		E

pH	Field Data	9/10/2013	106	7.2			E
pH	Field Data	10/8/2013	107	7.79			E
pH	Field Data	11/12/2013	108	7.62			E
pH	Field Data	12/10/2013	109	7.62			E
pH	Field Data	1/14/2014	110	7.79			E
pH	Field Data	2/10/2014	R14	7.71			E
Staff Gage	Field Data	9/10/2013	106	65.68	ft		E
Staff Gage	Field Data	10/8/2013	107	65.4	ft		E
Staff Gage	Field Data	11/12/2013	108	65.9	ft		E
Staff Gage	Field Data	12/10/2013	109	65.86	ft		E
Staff Gage	Field Data	1/14/2014	110	65.3	ft		E
Staff Gage	Field Data	2/10/2014	R14	65.7	ft		E
Temp	Field Data	9/10/2013	106	24.13	c		E
Temp	Field Data	10/8/2013	107	17.32	c		E
Temp	Field Data	11/12/2013	108	14.27	c		E
Temp	Field Data	12/10/2013	109	6.54	c		E
Temp	Field Data	1/14/2014	110	9.43	c		E
Temp	Field Data	2/10/2014	R14	15.73	c		E

Monitoring Site: **Salt Slough at Sand Dam**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.41	mg/l		E
DO	Field Data	2/10/2014	R14	6.93	mg/l		E
EC	Field Data	9/9/2013	106	955	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1172	µmhos/cm		E
Flow	Field Data	9/9/2013	106	28.5	cfs		E
pH	Field Data	9/9/2013	106	7.31			E
pH	Field Data	2/10/2014	R14	7.48			E
Temp	Field Data	9/9/2013	106	25.89	c		E
Temp	Field Data	2/10/2014	R14	14.38	c		E

Monitoring Site: **San Joaquin River at Lander Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	14.3	mg/l		E
DO	Field Data	10/8/2013	107	12.31	mg/l		E
DO	Field Data	11/12/2013	108	8.94	mg/l		E
DO	Field Data	12/10/2013	109	9.6	mg/l		E
DO	Field Data	1/14/2014	110	11	mg/l		E
DO	Field Data	2/10/2014	R14	13.42	mg/l		E

EC	Field Data	9/10/2013	106	1672	µmhos/cm		E
EC	Field Data	10/8/2013	107	891	µmhos/cm		E
EC	Field Data	11/12/2013	108	841	µmhos/cm		E
EC	Field Data	12/10/2013	109	12.2	µmhos/cm		E
EC	Field Data	1/14/2014	110	1450	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1539	µmhos/cm		E
Flow	Field Data	9/10/2013	106	0	cfs		E
Flow	Field Data	10/8/2013	107	2	cfs		E
Flow	Field Data	11/12/2013	108	5	cfs		E
Flow	Field Data	12/10/2013	109	8	cfs		E
Flow	Field Data	1/14/2014	110	8	cfs		E
Flow	Field Data	2/10/2014	R14	13	cfs		E
pH	Field Data	9/10/2013	106	8.62			E
pH	Field Data	10/8/2013	107	8.61			E
pH	Field Data	11/12/2013	108	8.06			E
pH	Field Data	12/10/2013	109	8.75			E
pH	Field Data	1/14/2014	110	8.04			E
pH	Field Data	2/10/2014	R14	8.22			E
Temp	Field Data	9/10/2013	106	26.37	c		E
Temp	Field Data	10/8/2013	107	17.6	c		E
Temp	Field Data	11/12/2013	108	13.6	c		E
Temp	Field Data	12/10/2013	109	6.25	c		E
Temp	Field Data	1/14/2014	110	9.54	c		E
Temp	Field Data	2/10/2014	R14	14.45	c		E

Monitoring Site: **San Joaquin River at PID Pumps**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	5.99	mg/l		E
DO	Field Data	10/8/2013	107	5.13	mg/l		E
DO	Field Data	11/12/2013	108	5.48	mg/l		E
DO	Field Data	12/10/2013	109	6.15	mg/l		E
DO	Field Data	1/14/2014	110	6.45	mg/l		E
EC	Field Data	9/10/2013	106	1800	µmhos/cm		E
EC	Field Data	10/8/2013	107	1750	µmhos/cm		E
EC	Field Data	11/12/2013	108	1086	µmhos/cm		E
EC	Field Data	12/10/2013	109	975	µmhos/cm		E
EC	Field Data	1/14/2014	110	1127	µmhos/cm		E
EC	Field Data	2/10/2014	R14	1350	µmhos/cm		E
Est Depth	Field Data	11/12/2013	108	5	ft		E

Est Depth	Field Data	12/10/2013	109	10	ft		E
Est Depth	Field Data	1/14/2014	110	15	ft		E
Est Depth	Field Data	2/10/2014	R14	15	ft		E
Flow	Field Data	9/10/2013	106	138	cfs		E
Flow	Field Data	10/8/2013	107	407	cfs		E
Flow	Field Data	11/12/2013	108	533	cfs		E
Flow	Field Data	12/10/2013	109	469	cfs		E
Flow	Field Data	1/14/2014	110	338	cfs		E
Flow	Field Data	2/10/2014	R14	520	cfs		E
pH	Field Data	9/10/2013	106	7.99			E
pH	Field Data	10/8/2013	107	7.89			E
pH	Field Data	11/12/2013	108	8.13			E
pH	Field Data	12/10/2013	109	8.39			E
pH	Field Data	1/14/2014	110	8.09			E
pH	Field Data	2/10/2014	R14	7.88			E
Staff Gage	Field Data	11/12/2013	108	0	ft		E
Staff Gage	Field Data	12/10/2013	109	0	ft		E
Temp	Field Data	9/10/2013	106	22.46	c		E
Temp	Field Data	10/8/2013	107	19.15	c		E
Temp	Field Data	11/12/2013	108	12	c		E
Temp	Field Data	12/10/2013	109	9	c		E
Temp	Field Data	1/14/2014	110	10	c		E
Temp	Field Data	2/10/2014	R14	11	c		E

Monitoring Site: **San Joaquin River at Sack Dam**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	6.53	mg/l		E
DO	Field Data	10/8/2013	107	8.52	mg/l		E
DO	Field Data	11/12/2013	108	10.22	mg/l		E
DO	Field Data	12/10/2013	109	8.97	mg/l		E
DO	Field Data	1/14/2014	110	11.65	mg/l		E
DO	Field Data	2/10/2014	R14	10.11	mg/l		E
EC	Field Data	9/10/2013	106	646	µmhos/cm		E
EC	Field Data	10/8/2013	107	580	µmhos/cm		E
EC	Field Data	11/12/2013	108	489	µmhos/cm		E
EC	Field Data	12/10/2013	109	495	µmhos/cm		E
EC	Field Data	1/14/2014	110	370	µmhos/cm		E
EC	Field Data	2/10/2014	R14	602	µmhos/cm		E
Est Depth	Field Data	9/10/2013	106	4.68	ft		E

Est Depth	Field Data	10/8/2013	107	4.7	ft		E
Est Depth	Field Data	11/12/2013	108	5.4	ft		E
Est Depth	Field Data	12/10/2013	109	5	ft		E
Est Depth	Field Data	1/14/2014	110	4.4	ft		E
Est Depth	Field Data	2/10/2014	R14	4.6	ft		E
Flow	Field Data	10/8/2013	107	8	cfs		E
Flow	Field Data	11/12/2013	108	30	cfs		E
Flow	Field Data	12/10/2013	109	17	cfs		E
Flow	Field Data	1/14/2014	110	9	cfs		E
Flow	Field Data	2/10/2014	R14	0	cfs		E
pH	Field Data	9/10/2013	106	7.64			E
pH	Field Data	10/8/2013	107	8.41			E
pH	Field Data	11/12/2013	108	8.34			E
pH	Field Data	12/10/2013	109	8.51			E
pH	Field Data	1/14/2014	110	9.16			E
pH	Field Data	2/10/2014	R14	7.81			E
Staff Gage	Field Data	9/10/2013	106	4.68	ft		E
Staff Gage	Field Data	10/8/2013	107	4.7	ft		E
Staff Gage	Field Data	11/12/2013	108	5.9	ft		E
Staff Gage	Field Data	12/10/2013	109	5	ft		E
Staff Gage	Field Data	1/14/2014	110	4.4	ft		E
Staff Gage	Field Data	2/10/2014	R14	4.6	ft		E
Temp	Field Data	9/10/2013	106	25.29	c		E
Temp	Field Data	10/8/2013	107	18.34	c		E
Temp	Field Data	11/12/2013	108	14.56	c		E
Temp	Field Data	12/10/2013	109	5.5	c		E
Temp	Field Data	1/14/2014	110	8.11	c		E
Temp	Field Data	2/10/2014	R14	15.39	c		E

Monitoring Site: **Turner Slough at Edminster Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/10/2013	106	3.62	mg/l		E
DO	Field Data	10/8/2013	107	0.58	mg/l		E
DO	Field Data	11/12/2013	108	6.5	mg/l		E
DO	Field Data	12/10/2013	109	2.7	mg/l		E
DO	Field Data	1/14/2014	110	8.02	mg/l		E
DO	Field Data	2/10/2014	R14	0.78	mg/l		E
EC	Field Data	9/10/2013	106	1801	µmhos/cm		E
EC	Field Data	10/8/2013	107	2091	µmhos/cm		E

EC	Field Data	11/12/2013	108	713	µmhos/cm		E
EC	Field Data	12/10/2013	109	5.34	µmhos/cm		E
EC	Field Data	1/14/2014	110	457	µmhos/cm		E
EC	Field Data	2/10/2014	R14	401	µmhos/cm		E
Est Depth	Field Data	10/8/2013	107	1.2	ft		E
Est Depth	Field Data	11/12/2013	108	2.5	ft		E
Est Depth	Field Data	2/10/2014	R14	2.19	ft		E
Flow	Field Data	9/10/2013	106	0	cfs		E
pH	Field Data	9/10/2013	106	7.8			E
pH	Field Data	10/8/2013	107	7.92			E
pH	Field Data	11/12/2013	108	7.32			E
pH	Field Data	12/10/2013	109	7.22			E
pH	Field Data	1/14/2014	110	7.5			E
pH	Field Data	2/10/2014	R14	6.87			E
Staff Gage	Field Data	10/8/2013	107	0.07	ft		E
Staff Gage	Field Data	11/12/2013	108	2	ft		E
Staff Gage	Field Data	2/10/2014	R14	1.68	ft		E
Temp	Field Data	9/10/2013	106	18.61	c		E
Temp	Field Data	10/8/2013	107	17.44	c		E
Temp	Field Data	11/12/2013	108	10.13	c		E
Temp	Field Data	12/10/2013	109	4.55	c		E
Temp	Field Data	1/14/2014	110	7.66	c		E
Temp	Field Data	2/10/2014	R14	9.08	c		E

Monitoring Site: **Westley Wasteway near Cox Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Units	DLR	Sample Type
DO	Field Data	9/9/2013	106	5.5	mg/l		E
DO	Field Data	9/10/2013	106	5.78	mg/l		E
DO	Field Data	10/8/2013	107	6.23	mg/l		E
DO	Field Data	11/12/2013	108	6.13	mg/l		E
DO	Field Data	12/10/2013	109	6.3	mg/l		E
DO	Field Data	1/14/2014	110	6.51	mg/l		E
EC	Field Data	9/9/2013	106	781	µmhos/cm		E
EC	Field Data	9/10/2013	106	781	µmhos/cm		E
EC	Field Data	10/8/2013	107	775	µmhos/cm		E
EC	Field Data	11/12/2013	108	1103	µmhos/cm		E
EC	Field Data	12/10/2013	109	855	µmhos/cm		E
EC	Field Data	1/14/2014	110	706	µmhos/cm		E
Est Depth	Field Data	10/8/2013	107	0.5	ft		E

Est Depth	Field Data	11/12/2013	108	0.5	ft	E
Est Depth	Field Data	12/10/2013	109	3	ft	E
Est Depth	Field Data	1/14/2014	110	1.5	ft	E
Flow	Field Data	9/9/2013	106	0	cfs	E
Flow	Field Data	9/10/2013	106	0	cfs	E
Flow	Field Data	10/8/2013	107	0	cfs	E
Flow	Field Data	11/12/2013	108	0	cfs	E
Flow	Field Data	12/10/2013	109	0.2	cfs	E
Flow	Field Data	1/14/2014	110	0	cfs	E
pH	Field Data	9/9/2013	106	6.63		E
pH	Field Data	9/10/2013	106	7.15		E
pH	Field Data	10/8/2013	107	7.19		E
pH	Field Data	11/12/2013	108	7.93		E
pH	Field Data	12/10/2013	109	9.1		E
pH	Field Data	1/14/2014	110	9.29		E
Staff Gage	Field Data	9/9/2013	106	3.29	ft	E
Staff Gage	Field Data	9/10/2013	106	3.26	ft	E
Staff Gage	Field Data	10/8/2013	107	3.35	ft	E
Staff Gage	Field Data	11/12/2013	108	3.2	ft	E
Staff Gage	Field Data	12/10/2013	109	3.65	ft	E
Staff Gage	Field Data	1/14/2014	110	3.2	ft	E
Temp	Field Data	9/9/2013	106	21.2	c	E
Temp	Field Data	9/10/2013	106	20.69	c	E
Temp	Field Data	10/8/2013	107	19.1	c	E
Temp	Field Data	11/12/2013	108	12	c	E
Temp	Field Data	12/10/2013	109	8	c	E
Temp	Field Data	1/14/2014	110	8	c	E

Westside San Joaquin River Watershed Coalition

Data Summary by Constituent

Monitoring Site: **Blewett Drain at Highway 132**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	9/10/2013	106	0.21		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.077	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.088	DNQ	mg/L	0.1	E
Bromide	General Chemistry	9/10/2013	106	0.24	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.18	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.5	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	3.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	2.9		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	4.1		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	18.9		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	25.9		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	200		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	210		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	260		mg/L	5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	3.9		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	2.9		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	4.9		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.62		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	0.31		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.13		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.099		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.057		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.17		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	540		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	550		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	750		mg/L	10	E
Total Organic Carbon	General Chemistry	9/9/2013	106	7200		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	3.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	3.6		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	3.4		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	140		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	38		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	29		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	39		NTU	0.2	E

Turbidity	General Chemistry	10/8/2013	107	14		NTU	0.1	E
Turbidity	General Chemistry	1/14/2014	110	13		NTU	0.1	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	86.25		%		E

Monitoring Site: **Del Puerto Creek at Hwy 33**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Total Organic Carbon	General Chemistry	9/9/2013	106	22000		mg/Kg dw	200	E
Bifenthrin	Pesticide	9/9/2013	106	5		ng/g dw	0.36	E
Chlorpyrifos	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
Cyhalothrin, lambda, total	Pesticide	9/9/2013	106	0.19	DNQ	ng/g dw	0.36	E
Cypermethrin, total	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
DDD(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	20	E
DDE(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	20	E
DDT(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	20	E
Diazinon	Pesticide	9/9/2013	106	0.21	DNQ	ng/g dw	0.36	E
Esfenvalerate/Fenvalerate, total	Pesticide	9/9/2013	106	0.38		ng/g dw	0.36	E
Permethrin, Total	Pesticide	9/9/2013	106	0.23	DNQ	ng/g dw	0.36	E
Allethrin	Sediment Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	58.8		%		E

Monitoring Site: **Del Puerto Creek near Cox Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	275800		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.33		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.13		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.11		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.077	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.35		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	4.1		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	1100		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.25	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.29	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	1.4		mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.085	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.46	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.6	DNQ	mg/L	1	E

Cadmium	General Chemistry	2/10/2014	R14	0.1		ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	23		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	2.3		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	4.2		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	5.1		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	6.1		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	3.7		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5.1		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	410.6		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	156.5		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	111.2		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	135.5		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	201.4		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	156.5		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	410		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	250		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	280		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	330		mg/L	20	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	440		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	380		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	4.2		ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.04	DNQ	ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	3.9		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	18		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	8.5		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	17		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	4.6		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	2.6		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	7		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	2.8		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	0.79		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.97		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	0.13		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.8		mg/L	0.1	E

OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.2		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.025		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.14		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.13		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.051		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.067		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.077		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	1.3		ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	680		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	730		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	870		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	1100		mg/L	20	E
Total Organic Carbon	General Chemistry	9/9/2013	106	8500		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	5.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	5.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	5.3		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	5.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.3		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	5		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	317		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	18		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	73		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	9		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	14		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	117		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	180		NTU	1	E
Turbidity	General Chemistry	10/8/2013	107	12		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	65		NTU	0.5	E
Turbidity	General Chemistry	12/10/2013	109	10		NTU	0.1	E
Turbidity	General Chemistry	1/14/2014	110	8.5		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	8.5		NTU	0.05	E
Zinc	General Chemistry	2/10/2014	R14	100		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	14		ug/L	1	E
Diuron	Pesticide	2/10/2014	R14	1.9	=	ug/L	0.4	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	90		%		E

Westside San Joaquin River Watershed Coalition

Data Summary by Constituent

Monitoring Site: **Delta Mendota Canal at DPWD**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	525000		cells/ml		E
Ammonia as N	General Chemistry	2/10/2014	R14	0.066	DNQ	mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	1.7		ug/L	0.5	E
Boron	General Chemistry	9/10/2013	106	150		ug/L	10	E
Boron	General Chemistry	10/8/2013	107	130		ug/L	10	E
Boron	General Chemistry	11/12/2013	108	360		ug/L	10	E
Boron	General Chemistry	12/10/2013	109	470		ug/L	10	E
Boron	General Chemistry	1/14/2014	110	380		ug/L	10	E
Boron	General Chemistry	2/10/2014	R14	690		ug/L	10	E
Bromide	General Chemistry	2/10/2014	R14	0.47	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	9/10/2013	106	2.3		ug/L	0.5	E
Copper	General Chemistry	9/10/2013	106	3.9		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	2.1		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	4.4		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	1.6		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	5.9		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	1.9		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	4.4		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	2.4		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	5.1		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	2		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	5		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	3.1		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	3.1		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	12.1		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	33.1		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	5.2		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	2		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	6.3		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	140		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	110		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	140		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	190		mg/L	5	E

Hardness as CaCO3	General Chemistry	1/14/2014	110	200		mg/L	5	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	250		mg/L	5	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.78		ug/L	0.25	E
Nickel	General Chemistry	9/10/2013	106	1.1		ug/L	0.5	E
Nickel	General Chemistry	9/10/2013	106	2.8		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	3.4		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	0.56		ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	0.96		ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	2.6		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	1.1		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	2.1		ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	2.2		ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	1.4		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	2.4		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	1.2		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	1.8		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	0.7		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.095		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.54	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	340		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	250		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	390		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	510		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	520		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	700		mg/L	10	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	3.1		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	15		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	10		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	36		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	12		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	10		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	12		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	11		NTU	0.1	E
Turbidity	General Chemistry	10/8/2013	107	6.1		NTU	0.05	E
Turbidity	General Chemistry	11/12/2013	108	20		NTU	0.1	E
Turbidity	General Chemistry	12/10/2013	109	6.5		NTU	0.05	E
Turbidity	General Chemistry	1/14/2014	110	5.6		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	8		NTU	0.05	E

Zinc	General Chemistry	9/10/2013	106	12		ug/L	1	E
Zinc	General Chemistry	9/10/2013	106	11		ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	2.6		ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	7.7		ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	23		ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	3.6		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	13		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	3.4		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	21		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	4.7		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	15		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	5.1		ug/L	1	E
Chlorpyrifos	Pesticide	11/12/2013	108	0.21	=	ug/L	0.015	E
Dimethoate	Pesticide	2/10/2014	R14	0.47	=	ug/L	0.10	E
Diuron	Pesticide	2/10/2014	R14	2.2	=	ug/L	0.4	E

Monitoring Site: **Hospital Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Total Organic Carbon	General Chemistry	9/9/2013	106	1500		mg/Kg dw	200	E
Bifenthrin	Pesticide	9/9/2013	106	0.85		ng/g dw	0.33	E
Chlorpyrifos	Pesticide	9/9/2013	106	0.13	DNQ	ng/g dw	0.33	E
Cyhalothrin, lambda, total	Pesticide	9/9/2013	106	4		ng/g dw	0.33	E
Cypermethrin, total	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.33	E
DDD(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	8.4	E
DDE(p,p')	Pesticide	9/9/2013	106	23		ng/g dw	8.4	E
DDT(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	8.4	E
Diazinon	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.33	E
Esfenvalerate/Fenvalerate, total	Pesticide	9/9/2013	106	0.32	DNQ	ng/g dw	0.33	E
Permethrin, Total	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.33	E
Allethrin	Sediment Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.33	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	0		%		E

Monitoring Site: **Ingram Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	9/10/2013	106	0.76		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.055	DNQ	mg/L	0.1	E
Bromide	General Chemistry	9/10/2013	106	0.21	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.18	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	7.3		mg/L	0.5	E

Dissolved Organic Carbon	General Chemistry	10/8/2013	107	5.3		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	116.2		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	201.4		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	360		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	150		mg/L	5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	6		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.87		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	3.2		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.7		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.29		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.11		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.16		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	370		mg/L	10	E
Total Organic Carbon	General Chemistry	9/9/2013	106	7900		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	8.7		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	4.6		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	96		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	8		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	27		NTU	0.2	E
Turbidity	General Chemistry	10/8/2013	107	16		NTU	0.1	E
Bifenthrin	Pesticide	9/9/2013	106	4.1		ng/g dw	0.34	E
Chlorpyrifos	Pesticide	9/9/2013	106	0.59		ng/g dw	0.34	E
Cyhalothrin, lambda, total	Pesticide	9/9/2013	106	8.3		ng/g dw	0.34	E
Cypermethrin, total	Pesticide	9/9/2013	106	1.1		ng/g dw	0.34	E
DDD(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	11	E
DDE(p,p')	Pesticide	9/9/2013	106	22		ng/g dw	11	E
DDT(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	11	E
Diazinon	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.34	E
Esfenvalerate/Fenvalerate, total	Pesticide	9/9/2013	106	1.3		ng/g dw	0.34	E
Permethrin, Total	Pesticide	9/9/2013	106	0.3	DNQ	ng/g dw	0.34	E
Allethrin	Sediment Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.34	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	0		%		E

Monitoring Site: **Los Banos Creek at China Camp Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	668300		cells/ml		E

Ammonia as N	General Chemistry	9/10/2013	106	11		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.088	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.044	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.088	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.23		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	15		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	2700		ug/L	20	E
Bromide	General Chemistry	9/10/2013	106	0.072	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.27	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.17	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.053	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.56	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.75	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	0.08	DNQ	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	2.1		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	4.1		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	7.9		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	2.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	2.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	2.5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	4.7		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	8.2		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	5.2		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	178.2		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	58.8		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	30.1		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	10.8		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	517.2		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	250		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	160		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	170		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	120		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	430		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	580		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.62		ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	4.2		ug/L	0.5	E

Nickel	General Chemistry	2/10/2014	R14	8.2	ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.97	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.25	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.78	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.76	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	3.9	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.18	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	14	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.53	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	0.35	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.13	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	0.97	mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	6.2	mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.26	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.059	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.031	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.039	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.02	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.15	mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.11	mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	1	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	750	mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	470	mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	450	mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	320	mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1100	mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	1900	mg/L	20	E
Total Organic Carbon	General Chemistry	9/9/2013	106	9400	mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	8.1	mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	2.7	mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	5.8	mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	2.7	mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	5.4	mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	16	mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	98	mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	10	mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	4	mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	3	mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	7	mg/L	3	E

Total Suspended Solids	General Chemistry	2/10/2014	R14	33		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	37		NTU	0.2	E
Turbidity	General Chemistry	10/8/2013	107	18		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	9.1		NTU	0.05	E
Turbidity	General Chemistry	12/10/2013	109	7.2		NTU	0.05	E
Turbidity	General Chemistry	1/14/2014	110	3.3		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	24		NTU	0.2	E
Zinc	General Chemistry	2/10/2014	R14	7.9		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	1		ug/L	1	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	80		%		E

Monitoring Site: **Los Banos Creek at Hwy 140**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	9/10/2013	106	95		%		E
Ceriodaphnia dubia	Aquatic Toxicity	10/8/2013	107	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	11/12/2013	108	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	12/10/2013	109	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	1/14/2014	110	90		%		E
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	9/10/2013	106	465300		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	10/8/2013	107	745800		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	11/12/2013	108	665300		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	12/10/2013	109	284000		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	12/10/2013	109	467000		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	1/14/2014	110	692500		cells/ml		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	710300		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.29		mg/L	0.1	E
Ammonia as N	General Chemistry	9/10/2013	106	0.25		mg/L	0.1	FD
Ammonia as N	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.1	FB
Ammonia as N	General Chemistry	10/8/2013	107	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.099	DNQ	mg/L	0.1	FD
Ammonia as N	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.1	FB
Ammonia as N	General Chemistry	11/12/2013	108	0.24		mg/L	0.1	FD
Ammonia as N	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.1	FB
Ammonia as N	General Chemistry	11/12/2013	108	0.3		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.044	DNQ	mg/L	0.1	FB
Ammonia as N	General Chemistry	12/10/2013	109	0.15		mg/L	0.1	FD
Ammonia as N	General Chemistry	12/10/2013	109	0.16		mg/L	0.1	E

Ammonia as N	General Chemistry	1/14/2014	110	0.2		mg/L	0.1	FD
Ammonia as N	General Chemistry	1/14/2014	110	0.044	DNQ	mg/L	0.1	FB
Ammonia as N	General Chemistry	1/14/2014	110	0.2		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.45		mg/L	0.1	E
Arsenic	General Chemistry	9/10/2013	106	5.6		ug/L	0.5	E
Arsenic	General Chemistry	9/10/2013	106	5.4		ug/L	0.5	FD
Arsenic	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	10/8/2013	107	5.4		ug/L	0.5	FD
Arsenic	General Chemistry	10/8/2013	107	5.4		ug/L	0.5	E
Arsenic	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	11/12/2013	108	5.8		ug/L	0.5	E
Arsenic	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	11/12/2013	108	5.6		ug/L	0.5	FD
Arsenic	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	12/10/2013	109	4.7		ug/L	0.5	FD
Arsenic	General Chemistry	12/10/2013	109	4.6		ug/L	0.5	E
Arsenic	General Chemistry	1/14/2014	110	10		ug/L	0.5	FD
Arsenic	General Chemistry	1/14/2014	110	10		ug/L	0.5	E
Arsenic	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	2/10/2014	R14	6		ug/L	0.5	E
Boron	General Chemistry	9/10/2013	106	510		ug/L	10	E
Boron	General Chemistry	9/10/2013	106	490		ug/L	10	FD
Boron	General Chemistry	9/10/2013	106	ND	ND	ug/L	10	FB
Boron	General Chemistry	10/8/2013	107	450		ug/L	10	FD
Boron	General Chemistry	10/8/2013	107	2.2	DNQ	ug/L	10	FB
Boron	General Chemistry	10/8/2013	107	440		ug/L	10	E
Boron	General Chemistry	11/12/2013	108	710		ug/L	10	FD
Boron	General Chemistry	11/12/2013	108	730		ug/L	10	E
Boron	General Chemistry	11/12/2013	108	ND	ND	ug/L	10	FB
Boron	General Chemistry	12/10/2013	109	1000		ug/L	10	FD
Boron	General Chemistry	12/10/2013	109	970		ug/L	10	E
Boron	General Chemistry	12/10/2013	109	ND	ND	ug/L	10	FB
Boron	General Chemistry	1/14/2014	110	3200		ug/L	20	E
Boron	General Chemistry	1/14/2014	110	3100		ug/L	20	FD
Boron	General Chemistry	1/14/2014	110	ND	ND	ug/L	10	FB
Boron	General Chemistry	2/10/2014	R14	1500		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.36	DNQ	mg/L	1	E
Bromide	General Chemistry	9/10/2013	106	ND	ND	mg/L	1	FB
Bromide	General Chemistry	9/10/2013	106	0.36	DNQ	mg/L	1	FD

Bromide	General Chemistry	10/8/2013	107	0.26	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.27	DNQ	mg/L	1	FD
Bromide	General Chemistry	10/8/2013	107	ND	ND	mg/L	1	FB
Bromide	General Chemistry	11/12/2013	108	0.33	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	ND	ND	mg/L	1	FB
Bromide	General Chemistry	11/12/2013	108	0.39	DNQ	mg/L	1	FD
Bromide	General Chemistry	12/10/2013	109	ND	ND	mg/L	1	FB
Bromide	General Chemistry	12/10/2013	109	0.21	DNQ	mg/L	1	FD
Bromide	General Chemistry	12/10/2013	109	0.17	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	1.2		mg/L	1	FD
Bromide	General Chemistry	1/14/2014	110	1.2		mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	ND	ND	mg/L	1	FB
Bromide	General Chemistry	2/10/2014	R14	0.6	DNQ	mg/L	1	E
Cadmium	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.1	FB
Cadmium	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.1	FB
Cadmium	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.1	FB
Cadmium	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.1	FB
Cadmium	General Chemistry	1/14/2014	110	0.06	DNQ	ug/L	0.1	E
Cadmium	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.1	FB
Cadmium	General Chemistry	1/14/2014	110	0.08	DNQ	ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	9/10/2013	106	5.7		ug/L	0.5	E
Copper	General Chemistry	9/10/2013	106	3.2		ug/L	0.5	FD
Copper	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.5	FB
Copper	General Chemistry	9/10/2013	106	5.6		ug/L	0.5	FD
Copper	General Chemistry	9/10/2013	106	2.2		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.5	FB
Copper	General Chemistry	10/8/2013	107	0.79		ug/L	0.5	FD
Copper	General Chemistry	10/8/2013	107	1.8		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	0.81		ug/L	0.5	E

Copper	General Chemistry	10/8/2013	107	1.8		ug/L	0.5	FD
Copper	General Chemistry	11/12/2013	108	1.3		ug/L	0.5	FD
Copper	General Chemistry	11/12/2013	108	0.22	DNQ	ug/L	0.5	FB
Copper	General Chemistry	11/12/2013	108	0.36	DNQ	ug/L	0.5	FB
Copper	General Chemistry	11/12/2013	108	0.41	DNQ	ug/L	0.5	FD
Copper	General Chemistry	11/12/2013	108	0.46	DNQ	ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	1.3		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	0.78		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	0.79		ug/L	0.5	FD
Copper	General Chemistry	12/10/2013	109	1.4		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	1.4		ug/L	0.5	FD
Copper	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.5	FB
Copper	General Chemistry	1/14/2014	110	0.54		ug/L	0.5	FD
Copper	General Chemistry	1/14/2014	110	0.86		ug/L	0.5	FD
Copper	General Chemistry	1/14/2014	110	0.87		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	0.53		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.5	FB
Copper	General Chemistry	2/10/2014	R14	0.92		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	1.5		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	5.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	5.1		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	0.47	DNQ	mg/L	0.5	FB
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	7.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.5	FB
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	7.4		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	0.73		mg/L	0.5	FB
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	11		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	10		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	19		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	18		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.5	FB
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	7.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	7.3		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	0.32	DNQ	mg/L	0.5	FB
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	15		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	13		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	131.4		MPN/100 mL	1	FD
E. coli	General Chemistry	9/10/2013	106	ND	ND	MPN/100 mL	1	E
E. coli	General Chemistry	9/10/2013	106	ND	ND	MPN/100 mL	1	FB

E. coli	General Chemistry	10/8/2013	107	ND	ND	MPN/100 mL	1	FB
E. coli	General Chemistry	10/8/2013	107	228.2		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	172.3		MPN/100 mL	1	FD
E. coli	General Chemistry	11/12/2013	108	ND	ND	MPN/100 mL	1	FB
E. coli	General Chemistry	11/12/2013	108	307.6		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	435.2		MPN/100 mL	1	FD
E. coli	General Chemistry	12/10/2013	109	2400	>	MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	ND	ND	MPN/100 mL	1	FB
E. coli	General Chemistry	12/10/2013	109	2400	>	MPN/100 mL	1	FD
E. coli	General Chemistry	1/14/2014	110	93.5		MPN/100 mL	1	FD
E. coli	General Chemistry	1/14/2014	110	ND	ND	MPN/100 mL	1	FB
E. coli	General Chemistry	1/14/2014	110	307.6		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	1299.7		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	230		mg/L	10	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	230		mg/L	10	FD
Hardness as CaCO3	General Chemistry	9/10/2013	106	ND	ND	mg/L	5	FB
Hardness as CaCO3	General Chemistry	10/8/2013	107	200		mg/L	5	FD
Hardness as CaCO3	General Chemistry	10/8/2013	107	200		mg/L	5	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	ND	ND	mg/L	5	FB
Hardness as CaCO3	General Chemistry	11/12/2013	108	ND	ND	mg/L	5	FB
Hardness as CaCO3	General Chemistry	11/12/2013	108	280		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	280		mg/L	5	FD
Hardness as CaCO3	General Chemistry	12/10/2013	109	ND	ND	mg/L	5	FB
Hardness as CaCO3	General Chemistry	12/10/2013	109	290		mg/L	10	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	300		mg/L	5	FD
Hardness as CaCO3	General Chemistry	1/14/2014	110	ND	ND	mg/L	5	FB
Hardness as CaCO3	General Chemistry	1/14/2014	110	860		mg/L	20	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	830		mg/L	20	FD
Hardness as CaCO3	General Chemistry	2/10/2014	R14	480		mg/L	20	E
Lead	General Chemistry	9/10/2013	106	1.6		ug/L	0.25	FD
Lead	General Chemistry	9/10/2013	106	1.6		ug/L	0.25	E
Lead	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.25	FD
Lead	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.25	FB
Lead	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.25	E
Lead	General Chemistry	10/8/2013	107	0.35		ug/L	0.25	E
Lead	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.25	FB
Lead	General Chemistry	10/8/2013	107	0.09	DNQ	ug/L	0.25	FD
Lead	General Chemistry	10/8/2013	107	0.35		ug/L	0.25	FD
Lead	General Chemistry	10/8/2013	107	0.09	DNQ	ug/L	0.25	E

Lead	General Chemistry	11/12/2013	108	0.34		ug/L	0.25	E
Lead	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.25	FB
Lead	General Chemistry	11/12/2013	108	0.05	DNQ	ug/L	0.25	E
Lead	General Chemistry	11/12/2013	108	0.06	DNQ	ug/L	0.25	FD
Lead	General Chemistry	11/12/2013	108	0.32		ug/L	0.25	FD
Lead	General Chemistry	12/10/2013	109	0.07	DNQ	ug/L	0.25	FD
Lead	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.25	FB
Lead	General Chemistry	12/10/2013	109	0.09	DNQ	ug/L	0.25	E
Lead	General Chemistry	12/10/2013	109	0.27		ug/L	0.25	FD
Lead	General Chemistry	12/10/2013	109	0.27		ug/L	0.25	E
Lead	General Chemistry	1/14/2014	110	0.1	DNQ	ug/L	0.25	FD
Lead	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.25	FD
Lead	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.25	FB
Lead	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.25	E
Lead	General Chemistry	1/14/2014	110	0.14	DNQ	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.24	DNQ	ug/L	0.25	E
Nickel	General Chemistry	9/10/2013	106	14		ug/L	0.5	FD
Nickel	General Chemistry	9/10/2013	106	3.8		ug/L	0.5	E
Nickel	General Chemistry	9/10/2013	106	3.8		ug/L	0.5	FD
Nickel	General Chemistry	9/10/2013	106	14		ug/L	0.5	E
Nickel	General Chemistry	9/10/2013	106	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	10/8/2013	107	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	10/8/2013	107	2.1		ug/L	0.5	FD
Nickel	General Chemistry	10/8/2013	107	2.3		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	4.2		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	4.3		ug/L	0.5	FD
Nickel	General Chemistry	11/12/2013	108	4.7		ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	4.6		ug/L	0.5	FD
Nickel	General Chemistry	11/12/2013	108	3.3		ug/L	0.5	FD
Nickel	General Chemistry	11/12/2013	108	0.08	DNQ	ug/L	0.5	FB
Nickel	General Chemistry	11/12/2013	108	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	11/12/2013	108	3.2		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	3.6		ug/L	0.5	FD
Nickel	General Chemistry	12/10/2013	109	4.6		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	4.6		ug/L	0.5	FD
Nickel	General Chemistry	12/10/2013	109	3.6		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	1/14/2014	110	3.3		ug/L	0.5	E

Nickel	General Chemistry	1/14/2014	110	3.3		ug/L	0.5	FD
Nickel	General Chemistry	1/14/2014	110	4		ug/L	0.5	FD
Nickel	General Chemistry	1/14/2014	110	4.4		ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	2/10/2014	R14	5.2		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	4.2		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.05	FB
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.71		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.69		mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.05	FB
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.068		mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.091		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.098		mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.095		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.05	FB
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.31		mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.2		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.05	FB
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.05	FB
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.5		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.8		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	0.13		mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.97		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.3		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.1		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	0.84		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	0.97		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	2.1		mg/L	0.1	E

OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.13		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.01	FB
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.13		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.43		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.43		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.01	FB
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.43		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.43		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.01	FB
OrthoPhosphate as P	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.01	FB
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.27		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.26		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.41		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.01	FB
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.41		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.44		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.57		mg/L	0.01	FD
Phosphate as P	General Chemistry	10/8/2013	107	0.58		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.01	FB
Selenium	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	FB
Selenium	General Chemistry	9/10/2013	106	0.45	DNQ	ug/L	1	FD
Selenium	General Chemistry	9/10/2013	106	0.49	DNQ	ug/L	1	E
Selenium	General Chemistry	10/8/2013	107	0.23	DNQ	ug/L	1	E
Selenium	General Chemistry	10/8/2013	107	0.25	DNQ	ug/L	1	FD
Selenium	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	FB
Selenium	General Chemistry	11/12/2013	108	0.23	DNQ	ug/L	1	FD
Selenium	General Chemistry	11/12/2013	108	ND	ND	ug/L	1	FB
Selenium	General Chemistry	11/12/2013	108	0.22	DNQ	ug/L	1	E
Selenium	General Chemistry	12/10/2013	109	0.23	DNQ	ug/L	1	E
Selenium	General Chemistry	12/10/2013	109	ND	ND	ug/L	1	FB
Selenium	General Chemistry	12/10/2013	109	0.24	DNQ	ug/L	1	FD
Selenium	General Chemistry	1/14/2014	110	0.27	DNQ	ug/L	1	E
Selenium	General Chemistry	1/14/2014	110	0.19	DNQ	ug/L	1	FD
Selenium	General Chemistry	1/14/2014	110	ND	ND	ug/L	1	FB
Selenium	General Chemistry	2/10/2014	R14	0.33	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	560		mg/L	10	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	ND	ND	mg/L	10	FB
Total Dissolved Solids	General Chemistry	9/10/2013	106	560		mg/L	10	FD
Total Dissolved Solids	General Chemistry	10/8/2013	107	520		mg/L	10	FD

Total Dissolved Solids	General Chemistry	10/8/2013	107	ND	ND	mg/L	10	FB
Total Dissolved Solids	General Chemistry	10/8/2013	107	510		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	ND	ND	mg/L	10	FB
Total Dissolved Solids	General Chemistry	11/12/2013	108	730		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	730		mg/L	10	FD
Total Dissolved Solids	General Chemistry	12/10/2013	109	ND	ND	mg/L	10	FB
Total Dissolved Solids	General Chemistry	12/10/2013	109	810		mg/L	10	FD
Total Dissolved Solids	General Chemistry	12/10/2013	109	790		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	2800		mg/L	10	FD
Total Dissolved Solids	General Chemistry	1/14/2014	110	2800		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	5	DNQ	mg/L	10	FB
Total Dissolved Solids	General Chemistry	2/10/2014	R14	1500		mg/L	20	E
Total Organic Carbon	General Chemistry	9/10/2013	106	5.7		mg/L	0.5	E
Total Organic Carbon	General Chemistry	9/10/2013	106	5.5		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	9/10/2013	106	0.37	DNQ	mg/L	0.5	FB
Total Organic Carbon	General Chemistry	10/8/2013	107	8.1		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	8		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.5	FB
Total Organic Carbon	General Chemistry	11/12/2013	108	0.52		mg/L	0.5	FB
Total Organic Carbon	General Chemistry	11/12/2013	108	13		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	12		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	12/10/2013	109	19		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	19		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.5	FB
Total Organic Carbon	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.5	FB
Total Organic Carbon	General Chemistry	1/14/2014	110	7.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	7.9		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	2/10/2014	R14	14		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	74		mg/L	3	FD
Total Suspended Solids	General Chemistry	9/10/2013	106	72		mg/L	3	E
Total Suspended Solids	General Chemistry	9/10/2013	106	ND	ND	mg/L	3	FB
Total Suspended Solids	General Chemistry	10/8/2013	107	2	DNQ	mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	3		mg/L	3	FD
Total Suspended Solids	General Chemistry	10/8/2013	107	ND	ND	mg/L	3	FB
Total Suspended Solids	General Chemistry	11/12/2013	108	7		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	ND	ND	mg/L	3	FB
Total Suspended Solids	General Chemistry	11/12/2013	108	8		mg/L	3	FD
Total Suspended Solids	General Chemistry	12/10/2013	109	5		mg/L	3	FD
Total Suspended Solids	General Chemistry	12/10/2013	109	5		mg/L	3	E

Total Suspended Solids	General Chemistry	12/10/2013	109	ND	ND	mg/L	3	FB
Total Suspended Solids	General Chemistry	1/14/2014	110	ND	ND	mg/L	3	FB
Total Suspended Solids	General Chemistry	1/14/2014	110	7		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	14		mg/L	3	FD
Total Suspended Solids	General Chemistry	2/10/2014	R14	6		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	45		NTU	0.2	FD
Turbidity	General Chemistry	9/10/2013	106	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	9/10/2013	106	50		NTU	0.2	E
Turbidity	General Chemistry	10/8/2013	107	9.8		NTU	0.05	FD
Turbidity	General Chemistry	10/8/2013	107	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	10/8/2013	107	9.5		NTU	0.05	E
Turbidity	General Chemistry	11/12/2013	108	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	11/12/2013	108	10		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	9.6		NTU	0.05	FD
Turbidity	General Chemistry	12/10/2013	109	6.5		NTU	0.05	FD
Turbidity	General Chemistry	12/10/2013	109	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	12/10/2013	109	6.4		NTU	0.05	E
Turbidity	General Chemistry	1/14/2014	110	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	1/14/2014	110	5.6		NTU	0.05	FD
Turbidity	General Chemistry	1/14/2014	110	5.6		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	5.6		NTU	0.05	E
Zinc	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	E
Zinc	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	FD
Zinc	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	FB
Zinc	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	FB
Zinc	General Chemistry	9/10/2013	106	11		ug/L	1	E
Zinc	General Chemistry	9/10/2013	106	11		ug/L	1	FD
Zinc	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	FD
Zinc	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	FB
Zinc	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	FB
Zinc	General Chemistry	10/8/2013	107	2.1		ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	2.5		ug/L	1	FD
Zinc	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	1.3		ug/L	1	FD
Zinc	General Chemistry	11/12/2013	108	ND	ND	ug/L	1	FD
Zinc	General Chemistry	11/12/2013	108	ND	ND	ug/L	1	FB
Zinc	General Chemistry	11/12/2013	108	ND	ND	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	1.4		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	0.7	DNQ	ug/L	1	FD

Zinc	General Chemistry	12/10/2013	109	ND	ND	ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	ND	ND	ug/L	1	FB
Zinc	General Chemistry	12/10/2013	109	1.6		ug/L	1	FD
Zinc	General Chemistry	12/10/2013	109	1.7		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	ND	ND	ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	1.1		ug/L	1	FD
Zinc	General Chemistry	1/14/2014	110	ND	ND	ug/L	1	FD
Zinc	General Chemistry	1/14/2014	110	2.3		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	ND	ND	ug/L	1	FB
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	2.1		ug/L	1	E

Monitoring Site: **Marshall Road Drain near River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	9/10/2013	106	0.29		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.26		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.11		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.29		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.088	DNQ	mg/L	0.1	E
Bromide	General Chemistry	9/10/2013	106	0.27	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.24	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	1.3		mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.083	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.74	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	5.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	5.5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	8.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	6.7		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	4.5		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	866.4		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	43.5		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	14.6		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	36.4		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	14.6		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	350		mg/L	20	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	240		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	280		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	290		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	350		mg/L	20	E

Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	3.9		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	2.9		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	4.7		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	2.6		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	4.2		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	2.6		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.4		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.2		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.4		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.1		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.11		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.094		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.12		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.082		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.21		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	650		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	800		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	870		mg/L	20	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1000		mg/L	10	E
Total Organic Carbon	General Chemistry	9/10/2013	106	8.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	6.3		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	8.7		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	6.6		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.5		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	433		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	36		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	21		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	52		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	47		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	180		NTU	1	E
Turbidity	General Chemistry	10/8/2013	107	19		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	24		NTU	0.2	E
Turbidity	General Chemistry	12/10/2013	109	45		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	6.1		NTU	0.05	E

Monitoring Site: **Mud Slough Upstream of San Luis Drain**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type

Ceriodaphnia dubia	Aquatic Toxicity	9/10/2013	106	95		%		E
Ceriodaphnia dubia	Aquatic Toxicity	10/8/2013	107	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	11/12/2013	108	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	12/10/2013	109	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	1/14/2014	110	95		%		E
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	97.5		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	692500		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.3		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.2		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.22		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.18		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.32		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	6.1		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	2000		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.38	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.34	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.5	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.2	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.88	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	1.1		mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	0.51		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	2.2		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	4.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	11		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	12		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	14		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	9.9		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	12		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	ND	ND	MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	88.6		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	83.6		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	21.6		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	65.7		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	145.5		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	180		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	250		mg/L	5	E

Hardness as CaCO3	General Chemistry	11/12/2013	108	330		mg/L	20	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	340		mg/L	50	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	490		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	550		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	0.89		ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	8.5		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	3.4		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.26		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.041	DNQ	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.046	DNQ	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.048	DNQ	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.7		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.7		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.4		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.7		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.085		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.27		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.19		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.14		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.091		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.11		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.42		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.26	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	470		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	680		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	950		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	1100		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1500		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	2000		mg/L	20	E
Total Organic Carbon	General Chemistry	9/10/2013	106	4.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	12		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	14		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	14		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	11		mg/L	0.5	E

Total Organic Carbon	General Chemistry	2/10/2014	R14	13		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	102		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	14		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	24		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	96		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	17		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	54		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	40		NTU	0.2	E
Turbidity	General Chemistry	10/8/2013	107	10		NTU	0.2	E
Turbidity	General Chemistry	11/12/2013	108	11		NTU	0.1	E
Turbidity	General Chemistry	12/10/2013	109	27		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	7.6		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	65		NTU	0.5	E
Zinc	General Chemistry	2/10/2014	R14	0.8	DNQ	ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	5.8		ug/L	1	E

Monitoring Site: **Newman Wasteway near Hills Ferry Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	762300		cells/ml		E
Ammonia as N	General Chemistry	10/8/2013	107	0.044	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.16		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.21		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.21		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.22		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	3.5		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	890		ug/L	10	E
Bromide	General Chemistry	10/8/2013	107	0.3	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.25	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.16	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.79	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.53	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	0.06	DNQ	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	0.93		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	4.4		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	3.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	4.7		mg/L	0.5	E

Dissolved Organic Carbon	General Chemistry	12/10/2013	109	3.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	3.5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5.3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	6.7		mg/L	0.5	E
E. coli	General Chemistry	10/8/2013	107	290.9		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	191.8		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	201.4		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	235.9		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	45.7		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	420		mg/L	50	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	570		mg/L	20	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	600		mg/L	50	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	550		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	480		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	0.98		ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	9.8		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	3.8		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	3.1		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	4.7		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	4.5		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	2.1		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.38		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.7		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	0.26		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.7		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.056		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.076		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.065		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.15		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.4		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.13		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.53	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	820		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	1200		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	1300		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1200		mg/L	10	E

Total Dissolved Solids	General Chemistry	2/10/2014	R14	1200		mg/L	20	E
Total Organic Carbon	General Chemistry	10/8/2013	107	3.4		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	6.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	4.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	6		mg/L	0.5	E
Total Suspended Solids	General Chemistry	10/8/2013	107	22		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	28		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	47		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	140		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	69		mg/L	3	E
Turbidity	General Chemistry	10/8/2013	107	17		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	16		NTU	0.1	E
Turbidity	General Chemistry	12/10/2013	109	25		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	60		NTU	0.5	E
Turbidity	General Chemistry	2/10/2014	R14	35		NTU	0.2	E
Zinc	General Chemistry	2/10/2014	R14	1.5		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	8.6		ug/L	1	E

Monitoring Site: **Orestimba Creek at Hwy 33**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	524500		cells/ml		E
Ammonia as N	General Chemistry	2/10/2014	R14	0.18		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	2.1		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	430		ug/L	10	E
Bromide	General Chemistry	2/10/2014	R14	0.41	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	4.9		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	5.5		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5		mg/L	0.5	E
E. coli	General Chemistry	2/10/2014	R14	8.6		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	450		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	0.05	DNQ	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.62		ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	3.7		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	2.5		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	7.4		mg/L	0.2	E

Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	0.92		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.031		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	6.9		ug/L	1	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	900		mg/L	10	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	5.2		mg/L	0.5	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	21		mg/L	3	E
Turbidity	General Chemistry	2/10/2014	R14	14		NTU	0.1	E
Zinc	General Chemistry	2/10/2014	R14	38		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	13		ug/L	1	E

Monitoring Site: **Orestimba Creek at River Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	10/8/2013	107	0.16		mg/L	0.1	E
Bromide	General Chemistry	10/8/2013	107	0.29	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	4.8		mg/L	0.5	E
E. coli	General Chemistry	10/8/2013	107	57.6		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	290		mg/L	5	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	11		mg/L	0.2	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.4		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.14		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.41		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	710		mg/L	10	E
Total Organic Carbon	General Chemistry	10/8/2013	107	5.3		mg/L	0.5	E
Total Suspended Solids	General Chemistry	10/8/2013	107	167		mg/L	3	E
Turbidity	General Chemistry	10/8/2013	107	70		NTU	0.5	E

Monitoring Site: **Poso Slough at Indiana Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	505800		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.25		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.066	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.19		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.22		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.1	FB
Ammonia as N	General Chemistry	2/10/2014	R14	0.16		mg/L	0.1	FD
Ammonia as N	General Chemistry	2/10/2014	R14	0.23		mg/L	0.1	E

Arsenic	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.5	FB
Arsenic	General Chemistry	2/10/2014	R14	7.4		ug/L	0.5	FD
Arsenic	General Chemistry	2/10/2014	R14	7		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	ND	ND	ug/L	10	FB
Boron	General Chemistry	2/10/2014	R14	390		ug/L	10	E
Boron	General Chemistry	2/10/2014	R14	390		ug/L	10	FD
Bromide	General Chemistry	9/10/2013	106	0.44	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.51	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.45	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.29	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.83	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.4	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.36	DNQ	mg/L	1	FD
Bromide	General Chemistry	2/10/2014	R14	ND	ND	mg/L	1	FB
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	FD
Cadmium	General Chemistry	2/10/2014	R14	0.09	DNQ	ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Cadmium	General Chemistry	2/10/2014	R14	0.11		ug/L	0.1	FD
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	FB
Copper	General Chemistry	2/10/2014	R14	0.27	DNQ	ug/L	0.5	FB
Copper	General Chemistry	2/10/2014	R14	1		ug/L	0.5	FD
Copper	General Chemistry	2/10/2014	R14	0.2	DNQ	ug/L	0.5	FB
Copper	General Chemistry	2/10/2014	R14	1.1		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	7.8		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	9		ug/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	3.2		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	1.7		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	1.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	4.1		mg/L	0.5	FD
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	4.2		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.5	FB
E. coli	General Chemistry	9/10/2013	106	139.6		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	86		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	60.9		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	64.4		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	34.5		MPN/100 mL	1	E

E. coli	General Chemistry	2/10/2014	R14	63.7		MPN/100 mL	1	FD
E. coli	General Chemistry	2/10/2014	R14	ND	ND	MPN/100 mL	1	FB
E. coli	General Chemistry	2/10/2014	R14	52		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	220		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	280		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	240		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	400		mg/L	50	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	380		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	250		mg/L	5	FD
Hardness as CaCO3	General Chemistry	2/10/2014	R14	250		mg/L	5	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	ND	ND	mg/L	5	FB
Lead	General Chemistry	2/10/2014	R14	0.06	DNQ	ug/L	0.25	FD
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	3.5		ug/L	0.25	FD
Lead	General Chemistry	2/10/2014	R14	2.9		ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	FB
Nickel	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.5	FB
Nickel	General Chemistry	2/10/2014	R14	10		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	12		ug/L	0.5	FD
Nickel	General Chemistry	2/10/2014	R14	1.6		ug/L	0.5	FD
Nickel	General Chemistry	2/10/2014	R14	1.5		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.23		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.57		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	0.29		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.15		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.14		mg/L	0.05	FD
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.05	FB
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.83		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	5.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.92		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	5.5		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.1	FB
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.3		mg/L	0.1	FD
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.8		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.14		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.05		mg/L	0.01	E

OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.057		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.026		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.033		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.091		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.067		mg/L	0.01	FD
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.01	FB
Phosphate as P	General Chemistry	10/8/2013	107	0.24		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.66	DNQ	ug/L	1	FD
Selenium	General Chemistry	2/10/2014	R14	0.63	DNQ	ug/L	1	E
Selenium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	FB
Total Dissolved Solids	General Chemistry	9/10/2013	106	710		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	940		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	750		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	1200		mg/L	20	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	900		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	ND	ND	mg/L	10	FB
Total Dissolved Solids	General Chemistry	2/10/2014	R14	650		mg/L	20	FD
Total Dissolved Solids	General Chemistry	2/10/2014	R14	660		mg/L	20	E
Total Organic Carbon	General Chemistry	9/9/2013	106	1800		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/9/2013	106	2200		mg/Kg dw	200	FD
Total Organic Carbon	General Chemistry	9/10/2013	106	3.1		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	1.5		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	2.4		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	7.5		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.8		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	4		mg/L	0.5	FD
Total Organic Carbon	General Chemistry	2/10/2014	R14	4		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.5	FB
Total Suspended Solids	General Chemistry	9/10/2013	106	158		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	87		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	74		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	136		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	240		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	200		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	234		mg/L	3	FD
Total Suspended Solids	General Chemistry	2/10/2014	R14	ND	ND	mg/L	3	FB
Turbidity	General Chemistry	9/10/2013	106	60		NTU	0.5	E
Turbidity	General Chemistry	10/8/2013	107	50		NTU	0.5	E
Turbidity	General Chemistry	11/12/2013	108	37		NTU	0.2	E

Turbidity	General Chemistry	12/10/2013	109	45		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	100		NTU	0.5	E
Turbidity	General Chemistry	2/10/2014	R14	ND	ND	NTU	0.05	FB
Turbidity	General Chemistry	2/10/2014	R14	85		NTU	0.5	E
Turbidity	General Chemistry	2/10/2014	R14	120		NTU	1	FD
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	0.9	DNQ	ug/L	1	FD
Zinc	General Chemistry	2/10/2014	R14	23		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	28		ug/L	1	FD
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	FB
Hyalella azteca	Sediment Toxicity	9/9/2013	106	96.25		%		E

Monitoring Site: **Ramona Lake near Fig Avenue**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	9/10/2013	106	0.45		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.18		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.16		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.35		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.78		mg/L	0.1	E
Bromide	General Chemistry	9/10/2013	106	0.21	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.44	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	2		mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.14	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.71	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	7.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	8.3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	14		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	10		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	9		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	76.7		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	8.6		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	1		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	4.1		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	18.7		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	420		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	460		mg/L	50	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	380		mg/L	50	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	360		mg/L	50	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	400		mg/L	20	E

Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	3.8		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.32		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	4.9		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.47		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	1.8		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	4.6		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	3.4		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	3.4		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	2.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	3.3		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.006	DNQ	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.35		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	1300		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	1100		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	1100		mg/L	20	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1100		mg/L	10	E
Total Organic Carbon	General Chemistry	9/9/2013	106	18000		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	10		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	15		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	17		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	10		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	8.8		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	62		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	115		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	130		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	142		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	46		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	31		NTU	0.2	E
Turbidity	General Chemistry	10/8/2013	107	45		NTU	0.2	E
Turbidity	General Chemistry	11/12/2013	108	50		NTU	0.5	E
Turbidity	General Chemistry	12/10/2013	109	65		NTU	0.5	E
Turbidity	General Chemistry	1/14/2014	110	12		NTU	0.1	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	93.33		%		E

Westside San Joaquin River Watershed Coalition

Data Summary by Constituent

Monitoring Site: **Salt Slough at Lander Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	9/10/2013	106	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	10/8/2013	107	95		%		E
Ceriodaphnia dubia	Aquatic Toxicity	11/12/2013	108	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	12/10/2013	109	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	1/14/2014	110	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	592000		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.27		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.21		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.15		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.2		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.22		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.26		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	7.7		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	980		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.42	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.45	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.3	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.11	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.67	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.61	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	4		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	0.41	DNQ	ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	4.9		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	4.3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	5.5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	4.5		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	5.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	4.9		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	157.6		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	209.8		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	ND	ND	MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	66.3		MPN/100 mL	1	E

E. coli	General Chemistry	1/14/2014	110	23.3		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	49.6		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	220		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	270		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	260		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	360		mg/L	50	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	350		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	380		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	1.3		ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	1.7		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	6.4		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.39		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.2		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.4		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.27		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	0.25		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.7		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.57		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.1		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.11		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.078		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.061		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.049		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.045		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.044		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.67		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.44	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	610		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	780		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	760		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	930		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1000		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	1200		mg/L	20	E
Total Organic Carbon	General Chemistry	9/10/2013	106	4.3		mg/L	0.5	E

Total Organic Carbon	General Chemistry	10/8/2013	107	4.1		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	5.8		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	6.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	4.8		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	166		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	143		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	172		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	82		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	135		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	197		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	65		NTU	0.5	E
Turbidity	General Chemistry	10/8/2013	107	70		NTU	0.5	E
Turbidity	General Chemistry	11/12/2013	108	95		NTU	0.5	E
Turbidity	General Chemistry	12/10/2013	109	32		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	9		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	65		NTU	0.5	E
Zinc	General Chemistry	2/10/2014	R14	12		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	E
Diuron	Pesticide	2/10/2014	R14	0.83	=	ug/L	0.4	E
Methomyl	Pesticide	9/10/2013	106	0.069	DNQ	ug/L	0.07	E

Monitoring Site: **Salt Slough at Sand Dam**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	108000		cells/ml		E
Ammonia as N	General Chemistry	2/10/2014	R14	0.32		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	4.3		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	270		ug/L	10	E
Bromide	General Chemistry	2/10/2014	R14	0.51	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	0.81		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	2.6		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	3.2		mg/L	0.5	E
E. coli	General Chemistry	2/10/2014	R14	27.5		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	250		mg/L	5	E
Lead	General Chemistry	2/10/2014	R14	0.74		ug/L	0.25	E

Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	1.2		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	3.5		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	1.5		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.2		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.27		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.57	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	720		mg/L	20	E
Total Organic Carbon	General Chemistry	9/9/2013	106	13000		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	2.9		mg/L	0.5	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	48		mg/L	3	E
Turbidity	General Chemistry	2/10/2014	R14	32		NTU	0.2	E
Zinc	General Chemistry	2/10/2014	R14	1.8		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	7.3		ug/L	1	E
Dimethoate	Pesticide	2/10/2014	R14	1.3	=	ug/L	0.10	E
Diuron	Pesticide	2/10/2014	R14	5.6	=	ug/L	2.0	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	97.5		%		E

Monitoring Site: **San Joaquin River at Lander Ave**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	9/10/2013	106	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	10/8/2013	107	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	11/12/2013	108	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	12/10/2013	109	100		%		E
Ceriodaphnia dubia	Aquatic Toxicity	1/14/2014	110	95		%		E
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	484500		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.19		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.044	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.088	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.11		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.066	DNQ	mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	3.4		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	250		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.99	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.35	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.4	DNQ	mg/L	1	E

Bromide	General Chemistry	12/10/2013	109	0.24	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.92	DNQ	mg/L	1	E
Bromide	General Chemistry	2/10/2014	R14	0.86	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	0.29	DNQ	ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	1.6		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	5.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	5.1		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	4.3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	4.2		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	3.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	4.2		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	8.6		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	68.4		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	42.2		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	8.6		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	38.9		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	43.9		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	280		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	140		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	200		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	210		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	240		mg/L	5	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	300		mg/L	5	E
Lead	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.5		ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	1		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	2.5		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.11		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	0.2		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.34		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.044	DNQ	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	0.062		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.021	DNQ	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	2.6		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.8		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.7		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.3		mg/L	0.1	E

Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.4		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.023		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.01		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	ND	ND	mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	0.14		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.16	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	940		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	510		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	640		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	720		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	830		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	970		mg/L	20	E
Total Organic Carbon	General Chemistry	9/10/2013	106	6.6		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	5.5		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	4.9		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	5.6		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.8		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	4.8		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	36		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	9		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	128		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	85		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	26		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	123		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	16		NTU	0.1	E
Turbidity	General Chemistry	10/8/2013	107	13		NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	32		NTU	0.2	E
Turbidity	General Chemistry	12/10/2013	109	25		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	8.7		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	36		NTU	0.2	E
Zinc	General Chemistry	2/10/2014	R14	5		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	E
Diuron	Pesticide	2/10/2014	R14	1.2	=	ug/L	0.4	E

Monitoring Site: **San Joaquin River at PID Pumps**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type

Ammonia as N	General Chemistry	2/10/2014	R14	0.14		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	2.5		ug/L	0.5	E
Boron	General Chemistry	9/10/2013	106	730		ug/L	10	E
Boron	General Chemistry	10/8/2013	107	900		ug/L	10	E
Boron	General Chemistry	11/12/2013	108	800		ug/L	10	E
Boron	General Chemistry	12/10/2013	109	920		ug/L	10	E
Boron	General Chemistry	1/14/2014	110	920		ug/L	10	E
Boron	General Chemistry	2/10/2014	R14	1500		ug/L	10	E
Bromide	General Chemistry	2/10/2014	R14	0.61	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	9/10/2013	106	1.4		ug/L	0.5	E
Copper	General Chemistry	9/10/2013	106	2.4		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	8.4		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	14		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	2.1		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	7.5		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	14		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	9.9		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	5.9		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	2.3		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	0.98		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	2.9		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	4.5		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	32.7		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	328.2		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	88.2		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	14.5		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	81.3		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	71.2		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	300		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	370		mg/L	10	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	280		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	310		mg/L	20	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	350		mg/L	20	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	380		mg/L	20	E
Lead	General Chemistry	2/10/2014	R14	0.55		ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.17	DNQ	ug/L	0.25	E
Nickel	General Chemistry	9/10/2013	106	2.7		ug/L	0.5	E
Nickel	General Chemistry	9/10/2013	106	1.8		ug/L	0.5	E

Nickel	General Chemistry	10/8/2013	107	2.3	ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	6.2	ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	1.8	ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	5.6	ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	2.3	ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	3.6	ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	2.6	ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	1.6	ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	3.4	ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	1.7	ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	1.9	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	1.1	mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.082	mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	1.9	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	810	mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	960	mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	820	mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	920	mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	1000	mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	1100	mg/L	10	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	4.4	mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	33	mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	28	mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	28	mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	16	mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	14	mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	36	mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	14	NTU	0.1	E
Turbidity	General Chemistry	10/8/2013	107	16	NTU	0.1	E
Turbidity	General Chemistry	11/12/2013	108	17	NTU	0.1	E
Turbidity	General Chemistry	12/10/2013	109	11	NTU	0.1	E
Turbidity	General Chemistry	1/14/2014	110	9.4	NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	20	NTU	0.1	E
Zinc	General Chemistry	9/10/2013	106	5.7	ug/L	1	E
Zinc	General Chemistry	9/10/2013	106	4.1	ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	9.2	ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	20	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	4.1	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	26	ug/L	1	E

Zinc	General Chemistry	12/10/2013	109	17		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	26		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	4.2		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	15		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	4.1		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	7		ug/L	1	E
Diuron	Pesticide	2/10/2014	R14	0.39	DNQ	ug/L	0.4	E

Monitoring Site: **San Joaquin River at Sack Dam**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	100		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	614800		cells/ml		E
Ammonia as N	General Chemistry	2/10/2014	R14	0.12		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	2		ug/L	0.5	E
Boron	General Chemistry	9/10/2013	106	190		ug/L	10	E
Boron	General Chemistry	10/8/2013	107	200		ug/L	10	E
Boron	General Chemistry	11/12/2013	108	260		ug/L	10	E
Boron	General Chemistry	12/10/2013	109	270		ug/L	10	E
Boron	General Chemistry	1/14/2014	110	180		ug/L	10	E
Boron	General Chemistry	2/10/2014	R14	250		ug/L	10	E
Bromide	General Chemistry	2/10/2014	R14	0.27	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	9/10/2013	106	1.7		ug/L	0.5	E
Copper	General Chemistry	9/10/2013	106	0.83		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	2.2		ug/L	0.5	E
Copper	General Chemistry	10/8/2013	107	0.88		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	1.3		ug/L	0.5	E
Copper	General Chemistry	11/12/2013	108	0.6		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	0.91		ug/L	0.5	E
Copper	General Chemistry	12/10/2013	109	0.67		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	0.94		ug/L	0.5	E
Copper	General Chemistry	1/14/2014	110	0.6		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	0.84		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	1.4		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	2.9		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	4.1		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	2		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	10.7		MPN/100 mL	1	E

E. coli	General Chemistry	12/10/2013	109	2		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	3.1		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	4.1		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	130		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	110		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	110		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	110		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	80		mg/L	5	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	120		mg/L	5	E
Lead	General Chemistry	2/10/2014	R14	0.04	DNQ	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.26		ug/L	0.25	E
Nickel	General Chemistry	9/10/2013	106	0.8		ug/L	0.5	E
Nickel	General Chemistry	9/10/2013	106	1.6		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	1.9		ug/L	0.5	E
Nickel	General Chemistry	10/8/2013	107	0.25	DNQ	ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	0.6		ug/L	0.5	E
Nickel	General Chemistry	11/12/2013	108	1.2		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	0.61		ug/L	0.5	E
Nickel	General Chemistry	12/10/2013	109	0.76		ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	0.5		ug/L	0.5	E
Nickel	General Chemistry	1/14/2014	110	0.66		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	0.87		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	1.4		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	0.49		mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	0.57		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.026		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.6	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	360		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	270		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	280		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	280		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	210		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	340		mg/L	10	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	2.8		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	2.9		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	ND	ND	mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	12		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	5		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	8		mg/L	3	E

Total Suspended Solids	General Chemistry	1/14/2014	110	13		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	10		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	7.4		NTU	0.05	E
Turbidity	General Chemistry	10/8/2013	107	5.2		NTU	0.05	E
Turbidity	General Chemistry	11/12/2013	108	5.3		NTU	0.05	E
Turbidity	General Chemistry	12/10/2013	109	2.4		NTU	0.05	E
Turbidity	General Chemistry	1/14/2014	110	4.7		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	6.7		NTU	0.05	E
Zinc	General Chemistry	9/10/2013	106	ND	ND	ug/L	1	E
Zinc	General Chemistry	9/10/2013	106	2.3		ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	2.9		ug/L	1	E
Zinc	General Chemistry	10/8/2013	107	ND	ND	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	ND	ND	ug/L	1	E
Zinc	General Chemistry	11/12/2013	108	2.1		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	1.4		ug/L	1	E
Zinc	General Chemistry	12/10/2013	109	3		ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	ND	ND	ug/L	1	E
Zinc	General Chemistry	1/14/2014	110	1.2		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	2.4		ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	ND	ND	ug/L	1	E

Monitoring Site: **Turner Slough at Edminster Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ceriodaphnia dubia	Aquatic Toxicity	2/10/2014	R14	100		%		E
Pimephales promelas	Aquatic Toxicity	2/10/2014	R14	97.5		%		E
Selenastrum capricornutum	Aquatic Toxicity	2/10/2014	R14	614500		cells/ml		E
Ammonia as N	General Chemistry	9/10/2013	106	0.3		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.19		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.099	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	12/10/2013	109	0.14		mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.26		mg/L	0.1	E
Ammonia as N	General Chemistry	2/10/2014	R14	0.29		mg/L	0.1	E
Arsenic	General Chemistry	2/10/2014	R14	1.7		ug/L	0.5	E
Boron	General Chemistry	2/10/2014	R14	110		ug/L	10	E
Bromide	General Chemistry	9/10/2013	106	0.61	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.62	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	0.23	DNQ	mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.073	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.2	DNQ	mg/L	1	E

Bromide	General Chemistry	2/10/2014	R14	0.081	DNQ	mg/L	1	E
Cadmium	General Chemistry	2/10/2014	R14	ND	ND	ug/L	0.1	E
Copper	General Chemistry	2/10/2014	R14	4.4		ug/L	0.5	E
Copper	General Chemistry	2/10/2014	R14	0.7		ug/L	0.5	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	10		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	13		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	11		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	8.4		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	3.2		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	2/10/2014	R14	11		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	156.5		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	235.9		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	23.1		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	6.3		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	35.9		MPN/100 mL	1	E
E. coli	General Chemistry	2/10/2014	R14	4.1		MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	410		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	880		mg/L	50	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	120		mg/L	5	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	58		mg/L	5	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	100		mg/L	5	E
Hardness as CaCO3	General Chemistry	2/10/2014	R14	90		mg/L	5	E
Lead	General Chemistry	2/10/2014	R14	0.11	DNQ	ug/L	0.25	E
Lead	General Chemistry	2/10/2014	R14	0.48		ug/L	0.25	E
Nickel	General Chemistry	2/10/2014	R14	1.6		ug/L	0.5	E
Nickel	General Chemistry	2/10/2014	R14	0.77		ug/L	0.5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	ND	ND	mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	0.068		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	0.058		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	1.2		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	2/10/2014	R14	ND	ND	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	4.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	4.2		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	1.5		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	1.1		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	4.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	2/10/2014	R14	6.3		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.4		mg/L	0.01	E

OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.35		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.25		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.08		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.021		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	2/10/2014	R14	0.067		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	1		mg/L	0.01	E
Selenium	General Chemistry	2/10/2014	R14	0.08	DNQ	ug/L	1	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	1100		mg/L	10	E
Total Dissolved Solids	General Chemistry	10/8/2013	107	1300		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	420		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	290		mg/L	20	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	240		mg/L	10	E
Total Dissolved Solids	General Chemistry	2/10/2014	R14	250		mg/L	20	E
Total Organic Carbon	General Chemistry	9/10/2013	106	18		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	16		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	12		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	10		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	4.4		mg/L	0.5	E
Total Organic Carbon	General Chemistry	2/10/2014	R14	28		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	40		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	175		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	4		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	82		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	10		mg/L	3	E
Total Suspended Solids	General Chemistry	2/10/2014	R14	75		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	14		NTU	0.1	E
Turbidity	General Chemistry	10/8/2013	107	60		NTU	0.5	E
Turbidity	General Chemistry	11/12/2013	108	2.4		NTU	0.05	E
Turbidity	General Chemistry	12/10/2013	109	23		NTU	0.2	E
Turbidity	General Chemistry	1/14/2014	110	6.4		NTU	0.05	E
Turbidity	General Chemistry	2/10/2014	R14	19		NTU	0.1	E
Zinc	General Chemistry	2/10/2014	R14	0.8	DNQ	ug/L	1	E
Zinc	General Chemistry	2/10/2014	R14	5.7		ug/L	1	E

Monitoring Site: **Westley Wasteway near Cox Road**

Analyte/Species	Type	Sample Dates	Sample Event	Result	Flag	Units	DLR	Sample Type
Ammonia as N	General Chemistry	9/10/2013	106	0.38		mg/L	0.1	E
Ammonia as N	General Chemistry	10/8/2013	107	0.27		mg/L	0.1	E
Ammonia as N	General Chemistry	11/12/2013	108	0.31		mg/L	0.1	E

Ammonia as N	General Chemistry	12/10/2013	109	0.099	DNQ	mg/L	0.1	E
Ammonia as N	General Chemistry	1/14/2014	110	0.26		mg/L	0.1	E
Bromide	General Chemistry	9/10/2013	106	0.13	DNQ	mg/L	1	E
Bromide	General Chemistry	10/8/2013	107	0.19	DNQ	mg/L	1	E
Bromide	General Chemistry	11/12/2013	108	1.4		mg/L	1	E
Bromide	General Chemistry	12/10/2013	109	0.11	DNQ	mg/L	1	E
Bromide	General Chemistry	1/14/2014	110	0.44	DNQ	mg/L	1	E
Dissolved Organic Carbon	General Chemistry	9/10/2013	106	3.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	10/8/2013	107	6.6		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	11/12/2013	108	5.3		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	12/10/2013	109	6.8		mg/L	0.5	E
Dissolved Organic Carbon	General Chemistry	1/14/2014	110	7.3		mg/L	0.5	E
E. coli	General Chemistry	9/10/2013	106	131.4		MPN/100 mL	1	E
E. coli	General Chemistry	10/8/2013	107	195.6		MPN/100 mL	1	E
E. coli	General Chemistry	11/12/2013	108	275.5		MPN/100 mL	1	E
E. coli	General Chemistry	12/10/2013	109	51.2		MPN/100 mL	1	E
E. coli	General Chemistry	1/14/2014	110	2419.6	>	MPN/100 mL	1	E
Hardness as CaCO3	General Chemistry	9/10/2013	106	140		mg/L	10	E
Hardness as CaCO3	General Chemistry	10/8/2013	107	230		mg/L	5	E
Hardness as CaCO3	General Chemistry	11/12/2013	108	440		mg/L	50	E
Hardness as CaCO3	General Chemistry	12/10/2013	109	310		mg/L	10	E
Hardness as CaCO3	General Chemistry	1/14/2014	110	240		mg/L	5	E
Nitrate + Nitrite as N	General Chemistry	9/10/2013	106	0.23		mg/L	0.05	E
Nitrate + Nitrite as N	General Chemistry	10/8/2013	107	6.2		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	11/12/2013	108	10		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	12/10/2013	109	7.5		mg/L	0.2	E
Nitrate + Nitrite as N	General Chemistry	1/14/2014	110	0.036	DNQ	mg/L	0.05	E
Nitrogen, Total Kjeldahl	General Chemistry	9/10/2013	106	1.3		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	10/8/2013	107	0.4		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	11/12/2013	108	0.48		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	12/10/2013	109	0.18		mg/L	0.1	E
Nitrogen, Total Kjeldahl	General Chemistry	1/14/2014	110	1.5		mg/L	0.1	E
OrthoPhosphate as P	General Chemistry	9/10/2013	106	0.07		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	10/8/2013	107	0.5		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	11/12/2013	108	0.12		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	12/10/2013	109	0.13		mg/L	0.01	E
OrthoPhosphate as P	General Chemistry	1/14/2014	110	0.025		mg/L	0.01	E
Phosphate as P	General Chemistry	10/8/2013	107	1.2		mg/L	0.01	E
Total Dissolved Solids	General Chemistry	9/10/2013	106	390		mg/L	10	E

Total Dissolved Solids	General Chemistry	10/8/2013	107	560		mg/L	10	E
Total Dissolved Solids	General Chemistry	11/12/2013	108	870		mg/L	10	E
Total Dissolved Solids	General Chemistry	12/10/2013	109	860		mg/L	10	E
Total Dissolved Solids	General Chemistry	1/14/2014	110	620		mg/L	10	E
Total Organic Carbon	General Chemistry	9/9/2013	106	17000		mg/Kg dw	200	E
Total Organic Carbon	General Chemistry	9/10/2013	106	3.6		mg/L	0.5	E
Total Organic Carbon	General Chemistry	10/8/2013	107	7		mg/L	0.5	E
Total Organic Carbon	General Chemistry	11/12/2013	108	5.2		mg/L	0.5	E
Total Organic Carbon	General Chemistry	12/10/2013	109	7		mg/L	0.5	E
Total Organic Carbon	General Chemistry	1/14/2014	110	8.5		mg/L	0.5	E
Total Suspended Solids	General Chemistry	9/10/2013	106	31		mg/L	3	E
Total Suspended Solids	General Chemistry	10/8/2013	107	448		mg/L	3	E
Total Suspended Solids	General Chemistry	11/12/2013	108	40		mg/L	3	E
Total Suspended Solids	General Chemistry	12/10/2013	109	11		mg/L	3	E
Total Suspended Solids	General Chemistry	1/14/2014	110	17		mg/L	3	E
Turbidity	General Chemistry	9/10/2013	106	18		NTU	0.1	E
Turbidity	General Chemistry	10/8/2013	107	320		NTU	2	E
Turbidity	General Chemistry	11/12/2013	108	20		NTU	0.2	E
Turbidity	General Chemistry	12/10/2013	109	8.3		NTU	0.05	E
Turbidity	General Chemistry	1/14/2014	110	9.6		NTU	0.05	E
Bifenthrin	Pesticide	9/9/2013	106	23		ng/g dw	0.36	E
Chlorpyrifos	Pesticide	9/9/2013	106	0.2	DNQ	ng/g dw	0.36	E
Cyhalothrin, lambda, total	Pesticide	9/9/2013	106	0.86		ng/g dw	0.36	E
Cypermethrin, total	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
DDD(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	16	E
DDE(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	16	E
DDT(p,p')	Pesticide	9/9/2013	106	ND	ND	ng/g dw	16	E
Diazinon	Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
Esfenvalerate/Fenvalerate, total	Pesticide	9/9/2013	106	1.7		ng/g dw	0.36	E
Permethrin, Total	Pesticide	9/9/2013	106	0.93		ng/g dw	0.36	E
Allethrin	Sediment Pesticide	9/9/2013	106	ND	ND	ng/g dw	0.36	E
Hyalella azteca	Sediment Toxicity	9/9/2013	106	2.5		%		E

Appendix B
Communication Reports
Organized by Event Date

Appendix C
Laboratory Data Reports and EDDs

Field Data Sheets
Caltest General Physical, Drinking Water Data, Nutrient Data, Metals Data
APPL Pesticide Analyses
Pacific EcoRisk Toxicity Reports
Electronic Data Deliverable Files

Appendix D
Laboratory Quality Assurance Review

Laboratories Quality Assurance Review.

The Westside Coalition implements monitoring activities in accordance with Monitoring and Reporting Program Order No. R5-2008-0831 (MRP), which requires a number of different water quality analyses including aquatic toxicity testing, pesticide analyses, and other chemical analyses. Three laboratories are employed to perform the testing required by the MRP (See Table 4 in the SAMR), listed below:

- Pacific EcoRisk – Aquatic and sediment toxicity.
- APPL – Aquatic pesticide analyses.
- Caltest – General chemistry, nutrients, bacteria, and sediment pesticides.

Each of these laboratories are certified through the National Environmental Laboratory Accreditation Program (NELAP) and perform all testing and analyses according to the most current NELAP standards. Additionally, Caltest holds a certification from the Environmental Laboratory Accreditation Program (ELAP). Although the Westside Coalition reviews each of the laboratories' QA/QC results, it considers each of the laboratories to be experts in their respective fields and defers to their judgment regarding data acceptability.

Pacific EcoRisk QA/QC Review.

Pacific EcoRisk assesses six QA/QC measures including:

- Maintenance of acceptable test conditions.
- Negative control testing.
- Positive control testing (reference toxicant).
- Concentration response relationship assessment.
- Precision assessment testing (through field duplicate analyses)
- Laboratory completeness.

Table A summarizes the QA/QC results for tests performed by Pacific EcoRisk during the 2013/14 non-irrigation season. Event 109 laboratory RPD results for algae toxicity were outside the test acceptability criteria; per QAPP protocol, the test was rerun successfully.

Table A: Pacific EcoRisk QA/QC Results.

Event	Collected Samples	Successful Tests	Failed Control Tests	Re-tests	% Complete	RPD Exceedance①	Reference Toxicant Response②
106(Sed.)	10	10	0	0	100	None	Typical
106	7	7	0	0	100	None	Typical
107	7	7	0	0	100	None	Typical
108	7	7	0	0	100	None	Typical
109	7	7	0	0	100	1	Typical
110	7	7	0	0	100	None	Typical
R14	15	15	0	0	100	None	Typical

① RPD exceedance occurs when the calculated relative percent difference between the event and duplicate samples is greater than 25%.
② Response of the test species to reference toxicant measures the sensitivity of the species to known toxicants. Reference toxicant tests for all events were consistent with expected results.

All laboratory quality control criteria were met and no adjustments to the acceptance criteria for test acceptability were made. All of the reported data is considered to be usable.

APPL QA/QC Review.

APPL provides pesticide analyses for water samples collected as part of the MRP. Each batch of samples is also evaluated for accuracy and precision through additional QA/QC tests.

Accuracy tests include:

- Method Blanks
- Laboratory Control Spikes (LCS)
- Laboratory Control Spike Duplicates (LCSD)

Precision tests include:

- Calculation of relative percent difference for matrix spike and matrix spike duplicate samples
- Calculation of relative percent difference for laboratory control spike and laboratory control spike duplicate samples.

In addition to the precision and accuracy tests, APPL performs recovery tests on surrogate materials. The appropriate surrogate chemicals are introduced into the sample water prior to extraction and then tested and compared to the expected recovery ranges to determine the efficiency of the extraction performed.

Table B summarizes the laboratory QA/QC tests performed by APPL for samples collected by the Westside Coalition. During the 2013/14 non-irrigation season, APPL reported 1529 QA/QC results including surrogate results, MS/MSD results, method blanks, and LCS/LCSD results during this report period.

Table B: Summary of APPL Laboratory QC tests.

QC Evaluation	# of Tests	# out of Compliance	% in Compliance	Criteria
Lab Blank	344	1	100%	<RL
Surrogate	162	4	98%	w/in Range*
MS/MSD Recovery	359	20	94%	w/in Range*
MS/MSD RPD	297	16	95%	RPD<=25%
LCS/LCSD Recovery	366	4	99%	w/in Range*
LCS/LCSD RPD[1]	1	1	0%	RPD<=25%
* See Table C.				

Table C shows the acceptability criteria for RPD and recovery criteria.

[1] The Methamidophos analysis in surrogate sample 109-SJRSD-PE and 131212A blank recovered below control limit. The sample was re-extracted with acceptable surrogate recovery; the re-extracted LCS/LCSD exceeded the 25% RPD limit. There were no positive responses in the sample.

Table C: APPL QA/QC Tests and Acceptance Criteria (Continued).

Method	Analyte	LCS/LCSD		MS/MSD	
		Rec. Range	RPD	Rec. Range	RPD
EPA 8141A	Phorate	44-117	25	44-117	25
EPA 8141A	Demeton (Total)	12-85	25	12-85	25
EPA 8141A	Dichlorvos	46-141	25	46-141	25
EPA 8141A	Diazinon	57-130	25	57-130	25
EPA 8141A	Disulfoton	47-117	25	47-117	25
EPA 8141A	Dimethoate	68-202	25	68-202	25
EPA 8141A	EPTC	39-133	25	39-133	25
EPA 8141A	Methidathion	50-150	25	50-150	25
EPA 8141A	Phosmet	50-150	25	50-150	25
EPA 8141A	Parathion, ethyl	62-123	25	62-123	25
EPA 8141A	Parathion, methyl	55-164	25	55-164	25
EPA 8141A	Prowl (Pendimethalin)	63-129	25	63-129	25
EPA 8141A	Malathion	47-125	25	47-125	25
EPA 8141A	Chlorpyrifos	61-125	25	61-125	25
EPA 8141A	Azinphosmethyl	36-189	25	36-189	25
EPA 8141A	Trifluralin	44-117	25	44-117	25
EPA 8141A	Surrogate: Tributylphosphate (S)	60-150		60-150	
EPA 8141A	Surrogate: Triphenylphosphate (S)	56-129		56-129	
EPA 8141A	Prowl (Pendimethalin)	63-129	25	63-129	25
EPA 8141A	Trifluralin	44-117	25	44-117	25
EPA 8141A	Surrogate: Tributylphosphate (S)	60-150		60-150	
EPA 8141A	Surrogate: Triphenylphosphate (S)	56-129		56-129	
EPA 8321A	Methamidophos	40-135	25	40-135	25
EPA 8321A	Surrogate: Diphenamid (S)	70-130		70-130	
EPA 8321A	Surrogate: EPTC (S)	70-130		70-130	
EPA 8321A LL	Aldicarb	31-133	25	31-133	25
EPA 8321A LL	Carbaryl	44-133	25	44-133	25
EPA 8321A LL	Carbofuran	36-165	25	36-165	25
EPA 8321A LL	Diuron	52-136	25	52-136	25
EPA 8321A LL	Linuron	49-144	25	49-144	25
EPA 8321A LL	Methomyl	23-152	25	23-152	25
EPA 8321A LL	Methiocarb	35-142	25	35-142	25
EPA 8321A LL	Oxamyl	10-117	25	10-117	25
EPA 8321A LL	Surrogate: Tributylphosphate (S)	36-140		36-140	
EPA 8321A LL	Diuron	52-136	25	52-136	25
EPA 8321A LL	Linuron	49-144	25	49-144	25
EPA 8321A LL	Surrogate: Tributylphosphate (S)	36-140		36-140	

Because of the complicated nature of the water collected through this monitoring program, a percentage of QA/QC test failures are expected to occur. Overall, 97% of the laboratory QA/QC were within the acceptable criteria. No adjustments have been proposed for the QA/QC acceptability criteria. As noted earlier, APPL is a NELAP

certified laboratory and the Westside Coalition relies on their expert judgment to provide usable data.

Caltest QA/QC Review.

Caltest provides water analyses for general chemistry constituents, metals, nutrients, and bacteria as well as sediment pesticide analyses for sediment toxicity follow-up testing. Each batch of samples is also evaluated for accuracy and precision through additional QA/QC tests.

Accuracy tests include:

- Method Blanks
- Laboratory Control Spikes (LCS)
- Laboratory Control Spike Duplicates (LCSD)

Precision tests include:

- Calculation of relative percent difference for matrix spike and matrix spike duplicate samples
- Calculation of relative percent difference for laboratory control spike and laboratory control spike duplicate samples.

In addition to the precision and accuracy tests, Caltest performs recovery tests on surrogate materials when appropriate. The appropriate surrogate chemicals are introduced into the sample water prior to extraction and then tested and compared to the expected recovery ranges to determine the efficiency of the extraction method.

Table D summarizes the laboratory QA/QC test results performed by Caltest for samples collected by the Westside Coalition. During the 2013/14 non-irrigation season, Caltest performed approximately 1,104 QA/QC results.

Table D: Summary of Caltest Laboratory QC tests.

QC Evaluation	# of Tests	# out of Compliance	% in Compliance	Criteria
Lab Blank	274	1	100%	<RL
MS/MSD Recovery	308	19	94%	w/in Range*
MS/MSD RPD	297	0	100%	RPD<=20%
LCS/LCSD Recovery	220	0	100%	w/in Range*
LCS/LCSD RPD	15	0	100%	RPD<=20%
* See Table C.				

Table E shows the acceptability criteria for RPD and recovery criteria.

Table E: Caltest QA/QC Tests and Criteria.

Method	Analyte	Method Blank	LCS/LCSD		MS/MSD	
			Rec. Range	RPD	Rec. Range	RPD
EPA 180.1	Turbidity	0.05	90-110	20	-	-
EPA 200.8	Arsenic	0.5	85-115	20	85-115	20
EPA 200.8	Boron	10	85-115	20	85-115	20
EPA 200.8	Cadmium*	0.1	85-115	20	85-115	20
EPA 200.8	Copper*	0.5	85-115	20	85-115	20
EPA 200.8	Lead*	0.25	85-115	20	85-115	20
EPA 200.8	Nickel*	0.5	85-115	20	85-115	20
EPA 200.8	Selenium (reaction cell)	1	85-115	20	85-115	20
EPA 200.8	Zinc*	1	85-115	20	85-115	20
EPA 300.0	Bromide	0.01	90-110	20	90-110	20
EPA 353.2	Nitrogen, Nitrate-Nitrite	0.05	90-110	20	90-110	20
SM20-2340 C	Hardness (as CACO3)	5	80-120	20	80-120	20
SM20-2540 C	Total Dissolved Solids	10	80-120	20	-	-
SM20-2540 D	Total Suspended Solids	6	80-120	20	-	-
SM20-4500-NH3 C	Ammonia (as N)	0.1	90-110	20	90-110	20
SM20-4500-NH3 C (TKN)	Total Kjeldahl Nitrogen	0.1	90-110	20	90-110	20
SM20-4500-P E	Total Phosphorus as P	0.01	90-110	20	90-110	20
SM20-4500-P E (filtrate)	Ortho Phosphate as P	0.1	90-110	20	90-110	20
SM20-5310 B	Dissolved Organic Carbon	0.5	80-120	20	80-120	20
SM20-5310 B	Total Organic Carbon	0.5	80-120	20	80-120	20
SM-20-9223	E. Coli	1	NA	NA	NA	NA

* Tested as both total and dissolved fraction.

During the 2013/14 non-irrigation season (Events 106 through 110 and R14), more than 1,100 QA/QC tests were performed, with 20 tests falling outside the acceptable criteria (<2%). Because of the complicated nature of the water collected through this monitoring program, a percentage of QA/QC test results are expected to be outside of the criteria range. Based on the evaluation of the laboratory QA/QC results none of the result failures affect the data usability. No adjustments have been proposed for the QA/QC acceptability criteria. As noted earlier, Caltest is a NELAP and ELAP certified laboratory and the Westside Coalition relies on their expert judgment to provide usable data.

Appendix E
Sampling Event Photos

Event 106 – Ingram Creek at River Road

Event 106 – Del Puerto Creek at Cox Road

Event 106 – Orestimba Creek at River Road

Event 106 – Los Banos Creek at China Camp Road

Event 106 – San Joaquin River at Lander Ave

Event 106 – Mud Slough u/s San Luis Drain

Event 107 – Ingram Creek at River Road

Event 107 – SJR at PID Pumps (Las Palmas)

Event 107 – Blewett Drain at Highway 132

Event 107 – Westley Wasteway Near Cox Road

Event 107 – Los Banos Creek at Highway 140

Event 107 – Salt Slough at Lander Ave.

Event 108 – Westley Wasteway near Cox Road

Event 108 – Ingram Creek at River Road

Event 108 – Ramona Lake near Fig Avenue

Event 108 – Del Puerto Creek near Cox Road

Event 108 – Turner Slough at Edminster Road

Event 108 – Mud Slough u/s San Luis Drain

Event 109 – Del Puerto Creek near Cox Road

Event 109 – Ramona Lake near Fig Avenue

Event 109 – SJR at PID Pumps (Las Palmas)

Event 109 – Los Banos Creek at Highway 140

Event 109 – SJR at Lander Avenue

Event 109 – SJR at Sack Dam

Event 110 – Westley Wasteway near Cox Road

Event 110 – Ramona Lake near Fig Avenue

Event 110 – Del Puerto Creek near Cox Road

Event 110 – Poso Slough at Indiana Avenue

Event 110 – Los Banos Creek at China Camp Road

Event 110 – Salt Slough at Lander Avenue

Rain Event 14 – Delta Mendota Canal at Del Puerto WD

Rain Event 14 – Del Puerto Creek near Cox Road

Rain Event 14 – Orestimba Creek at River Road

Rain Event 14 – Los Banos Cr. at China Camp Rd.

Rain Event 14 – Los Banos Creek at Hwy 140

Rain Event 14 – Salt Slough at Lander Avenue

Appendix F
Wetland Water Quality Summary

		Reporting Period:	8/1//13	to	2/281/14
		Submittal Date:	6/9/2014		
Project Name:	Water Quality Monitoring in the Grassland RCD				
Contributor Name:	Grassland Water District				
Project Manager:	Ric Ortega	**Author:**	Patrick Rahilly		

Grassland Water District (GWD), in cooperation with the United States Bureau of Reclamation (USBR), has developed and now manages a real-time telemetered, web-enabled flow and water quality monitoring network consisting of 45 stations within the Grassland Resource Conservation District (GRCD). Primary funding for the network development and management came under the cooperative agreement with the USBR (#R10AC20661) which closed September 2012. In order to continue this effort, the District has acquired additional funding with the USBR under cooperative agreement #R12AC20025. Within these agreements, the management and maintenance of five stations associated with the Irrigated Lands Regulatory Program Ag-Waiver Program (ILRP) were included and monitoring at these sites has continued to date. These stations were retrofitted with YSI econet data loggers and telemetry and are reporting to the District's YSI based database. Raw data is available for public viewing on the YSI EcoNet website in real-time (web link below). Legacy Sontek flow meters at these stations have been replaced or refurbished and are now providing representative and continuous stage and flow in real-time. Additionally, YSI multi-parametric Sondes have been deployed at each of these locations sensing EC, pH, temperature, and stage. The Sonde stage readings are calibrated with the Sontek stage for redundancy and provide the ability to cross-reference during processing of the data making for more comprehensive and reliable data sets.

The ILRP Ag-Waiver monitoring stations are located at five major drainages of the GRCD. These major drainage points of the North Division of GWD include the Hollow Tree Drain, S-Lake Drain, Fremont Canal at Gun Club Road, Mud Slough at Gun Club Road, and Los Banos Creek at Highway 140. The Mud Slough and Fremont Canal sites have been in operation since 2000, Hollow Tree, S-Lake and Los Banos Creek were installed in 2001.

Summarized data are provided below for the five sites from September 1, 2013 to February 28, 2014. The 15 minute real-time data has been processed and represents 24 hour averages. QA/QC values have been plotted against the 24 hour averaged data stream. Salt loads in tons/day have been caluculated using a conversion factor of 1 dS/m:0.61 g/L. This ratio has been determined using the gravimetric procedure by a contracted laboratory. Data provided are provisional and are subject to change. Real-time raw data for the presented stations, as well as all the other stations associated with the GWD water quality monitoring network, can be viewed at the following link:

http://www.ysieconet.com/public/WebUI/Default.aspx?hidCustomerID=99 .

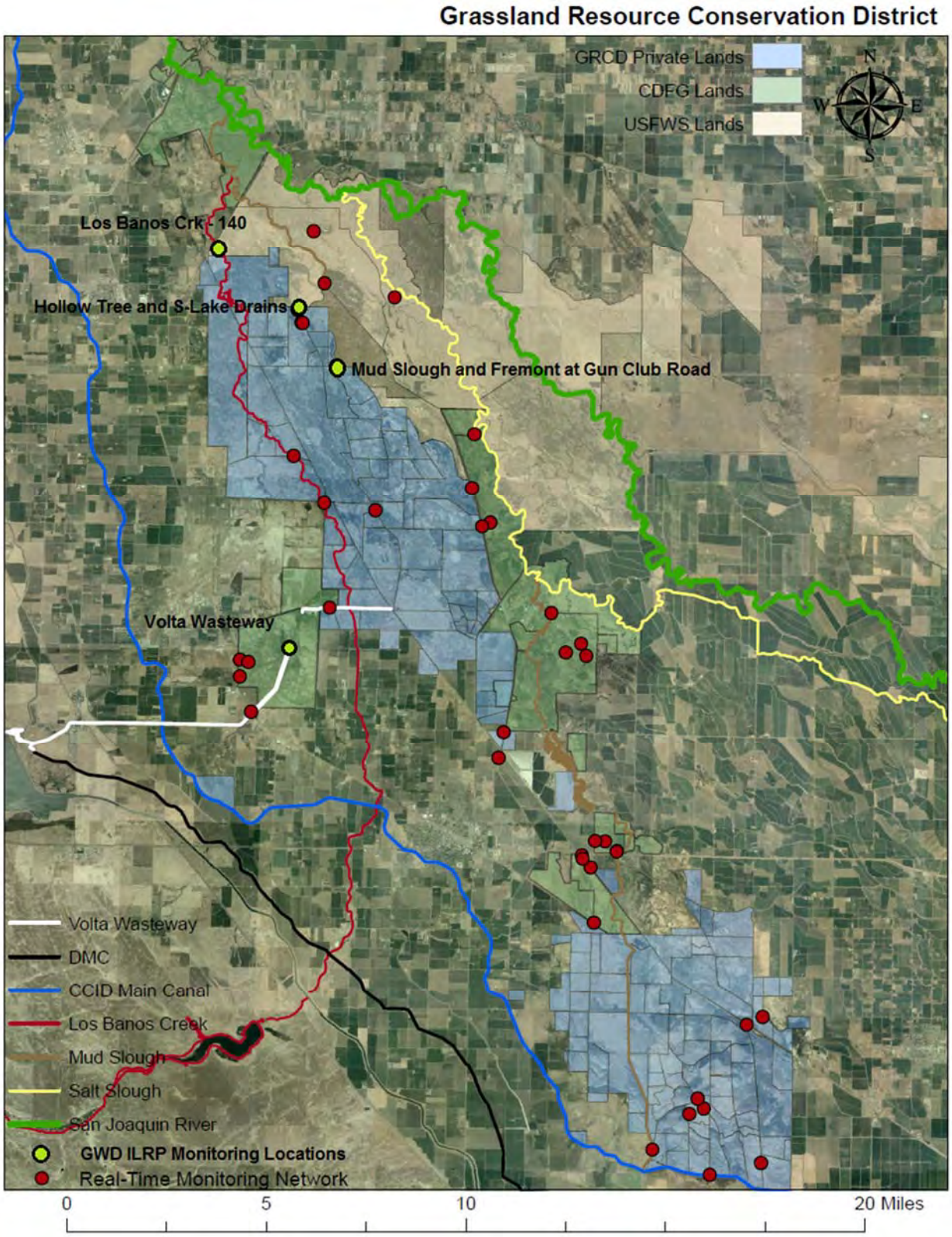


Figure 1. Real-time monitoring network map highlighting the ILRP monitoring locations as green dots.

Table 1. Laboratory data. Results were measured by APPL labs. TDS measured gravimetriacally.

	APPL 11/11/2010	**APPL** 12/14/2010	**APPL** 1/6/2011	**APPL** 2/9/2011	**APPL** 3/9/2011	**APPL** 4/13/2011
Mud Slough @ GCR						
Boron (ug/L)	1070	1730	1740	1870	2050	1790
Se (ug/L)	< 1	< 1	< 1	< 1	< 1	< 1
EC (uS/cm)	1700	1510	1530	2260	2390	1820
TDS (mg/L)	1060	937	960	1370	1460	1100
EC:TDS	0.624	0.621	0.627	0.606	0.611	0.604
Fremont Canal @ GCR						
Boron (ug/L)	773	1550	1250	1350	1340	2120
Se (ug/L)	< 1	< 1	< 1	< 1	< 1	< 1
EC (uS/cm)		1240	1170	1410	1260	1870
TDS (mg/L)		784	727	838	766	1150
EC:TDS		0.632	0.621	0.594	0.608	0.615
Hollow Tree Drain						
Boron (ug/L)	983	2070	2610	2350	2240	2560
Se (ug/L)	< 1	< 1	< 1	< 1	< 1	< 1
EC (uS/cm)		1950	2160	2430	2240	2790
TDS (mg/L)		1230	1390	1500	1400	1790
EC:TDS		0.631	0.644	0.617	0.625	0.642
S-Lake						
Boron (ug/L)	718	1580	1780	1970	2250	1880
Se (ug/L)	< 1	< 1	< 1	< 1	< 1	< 1
EC (uS/cm)		1380	1560	1960	2260	2190
TDS (mg/L)		839	969	1170	1350	1330
EC:TDS		0.608	0.621	0.597	0.597	0.607
Los Banos Crk @ 140						
Boron (ug/L)	877	2170	1980	3430	1920	2220
Se (ug/L)	< 1	< 1	< 1	< 1	< 1	< 1
EC (uS/cm)	1340	1730	1800	3960	1930	2390
TDS (mg/L)	791	1050	1120	2270	1160	1480
EC:TDS	0.590	0.607	0.622	0.573	0.601	0.619

EC:TDS total avg	**0.612**

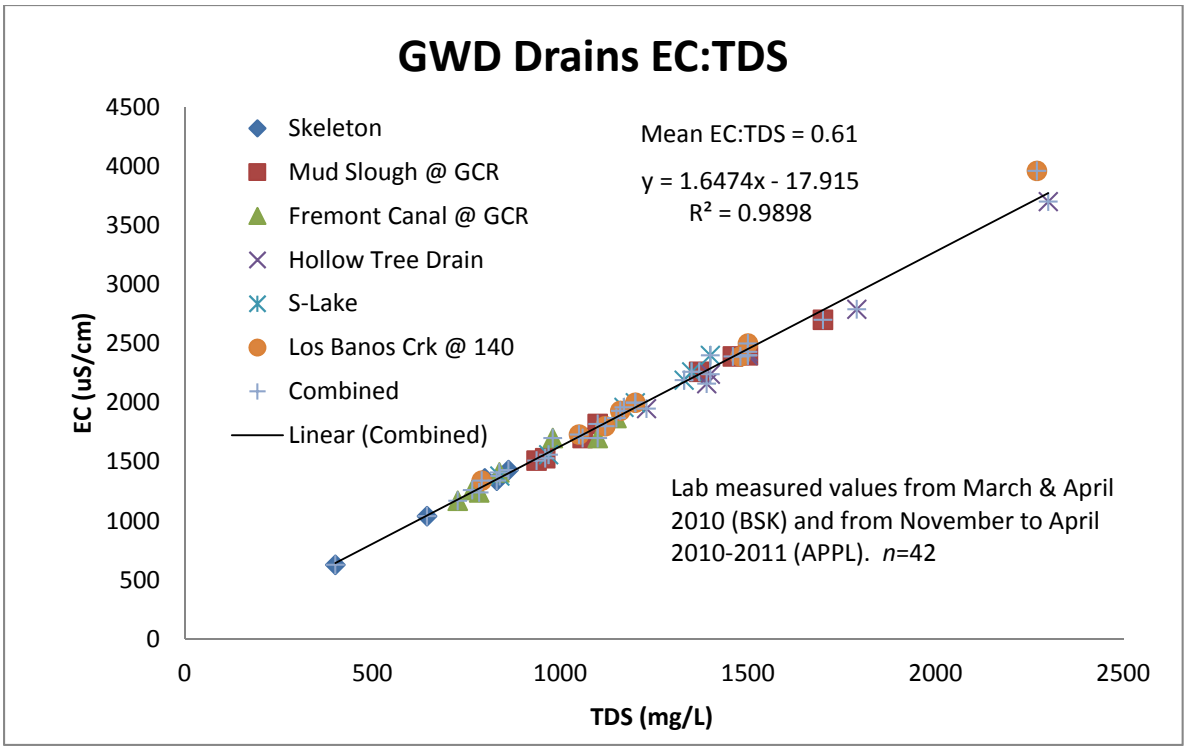


Figure 2. GWD drains EC:TDS, data in table 1.

Hollow Tree Drain

There were no issues with the sensors at this site during the reporting period. The YSI Sonde depth has been calibrated to the staff gauge that is associated with the broad crested weir, of which all the drain's flow passes through. The flow was calculated using historic flow to depth relationship ($y=22.813x^2+9.3215x$: R^2 = 0.9979). Flow for this site was calculated using this equation. Regular QA/QC continued through the entire reporting September 1, 2013 to February 28, 2014.

Table 2. Hollow Tree Drain Quality Assurance.

Hollow Tree Drain					
DATE	TIME	EC (uS/cm)	pH (#)	Stage (ft)	Flow (ft3/sec, calc)
8/6/2013	9:10	1289	7.17	0.00	0.00
9/16/2013	1405	1150	7.70	0.30	4.80
10/1/2013	10:26	1023	7.81	0.58	13.10
11/7/2013	8:45	1361	7.89	0.82	23.00
12/10/2013	13:55	1707	7.96	0.77	20.70
1/9/2014	9:41	2603	7.86	0.43	8.20
2/18/2014	11:34	3270	7.50	0.40	7.40

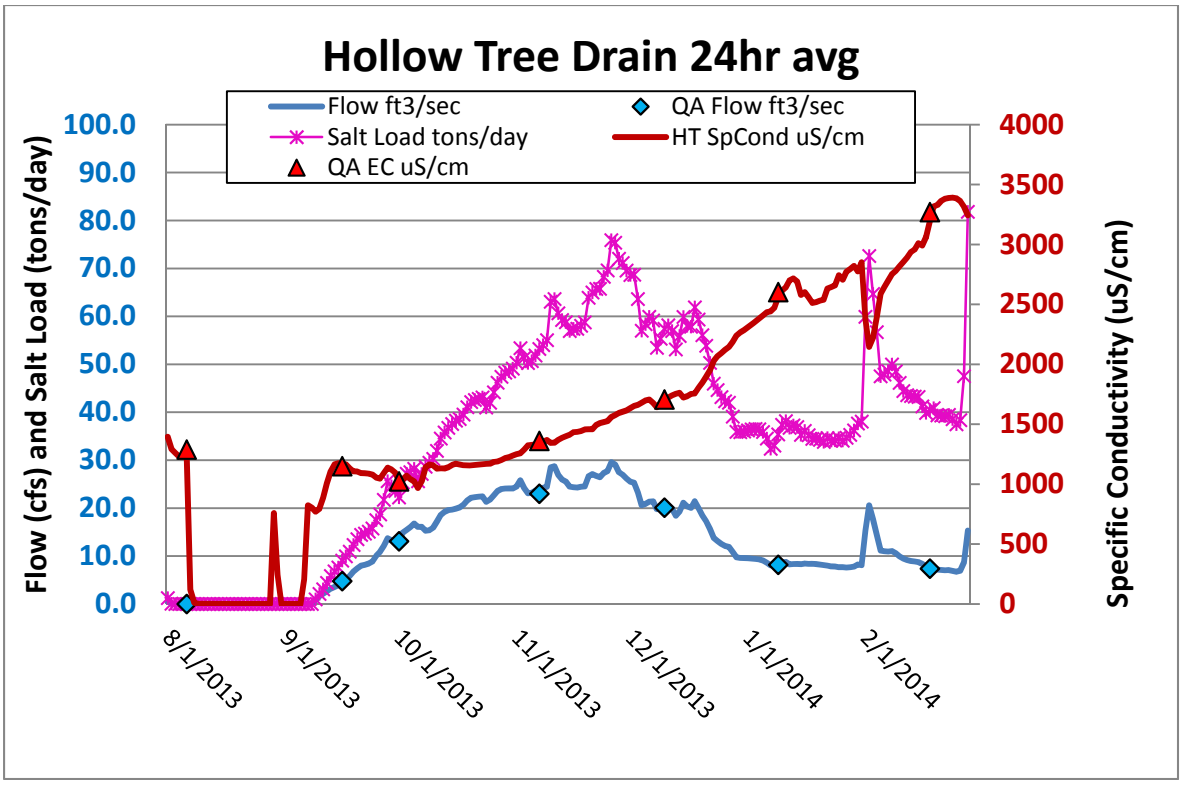


Figure 3. Hollow Tree Drain average daily calculated flow (cfs), EC (uS/cm), and calculated salt load (tons/day) with QA. Flow was calculated using historic depth to flow data relationship: Equation: $y=22.813x^2+9.3215x$ ($R^2 = 0.9979$) where x is depth (ft) and y is flow (cfs).

S-Lake Drain

The YSI Sonde and Sontek SL have been reporting constant and reliable data. Regular QA/QC continued through the entire reporting September 1, 2013 to February 28, 2014.

Table 3.S-Lake Quality Assurance.

S-Lake DATE	TIME	SITE ID	EC (uS/cm)	pH (#)	Stage (ft)	Velocity (ft/sec)	Flow (ft3/sec)
8/6/2013	9:10	S Lake	1571	7.18	0.60	0.07	0.46
9/13/2013	9:17	S Lake	-	-	-	0.00	0.00
9/16/2013	13:06	S Lake	970	8.09	1.35	-0.02	-0.16
9/30/2013	10:55	S Lake	-	-	-	0.00	0.00
10/1/2013	10:26	S Lake	905	7.76	3.10	0.22	12.68
11/7/2013	8:45	S Lake	1195	7.98	3.40	0.18	12.08
12/10/2013	13:55	S Lake	1532	8.01	3.40	0.22	15.05
1/9/2014	9:41	S Lake	1518	7.93	2.70	0.18	8.97
2/18/2014	11:34	S Lake	1926	7.58	2.60	0.17	8.06

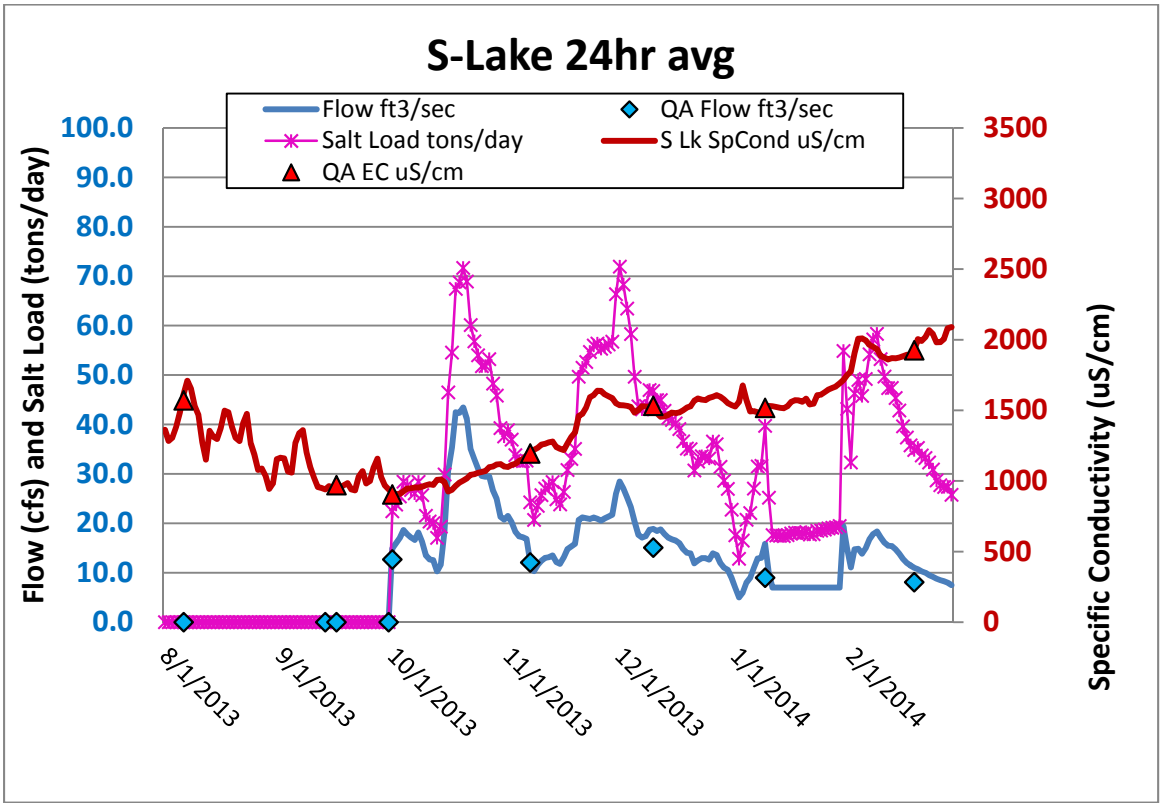


Figure 4. Average daily flow (cfs), EC (uS/cm), and calculated salt load (tons/day) with QA.

Los Banos Creek at Highway 140

The YSI Sonde and Sontek SL have been sending constant and reliable data since deployment. Regular QA/QC continued through the entire reporting September 1, 2013 to February 28, 2014.

Table 4.Los Banos Creek at Highway 140 Quality Assurance.

Los Banos Creek @ Hwy 140						
DATE	TIME	EC (uS/cm)	pH (#)	Stage (ft)	Velocity (ft/sec)	Flow (ft3/sec)
8/27/2013	13:35	1398	7.34	2.15	0.32	9.45
9/11/2013	10:07	998	8.01	1.30	0.17	2.60
10/11/2013	9:19	877	8.25	1.40	0.15	2.77
10/28/2013	12:22	1104	7.68	-	-	-
11/19/2013	10:05	1272	7.65	2.10	0.25	7.75
12/16/2013	12:10	1537	7.80	2.20	0.26	9.20
1/16/2014	8:51	3236	7.76	1.10	0.07	0.56
2/19/2014	12:13	3236	8.05	1.20	0.10	1.08

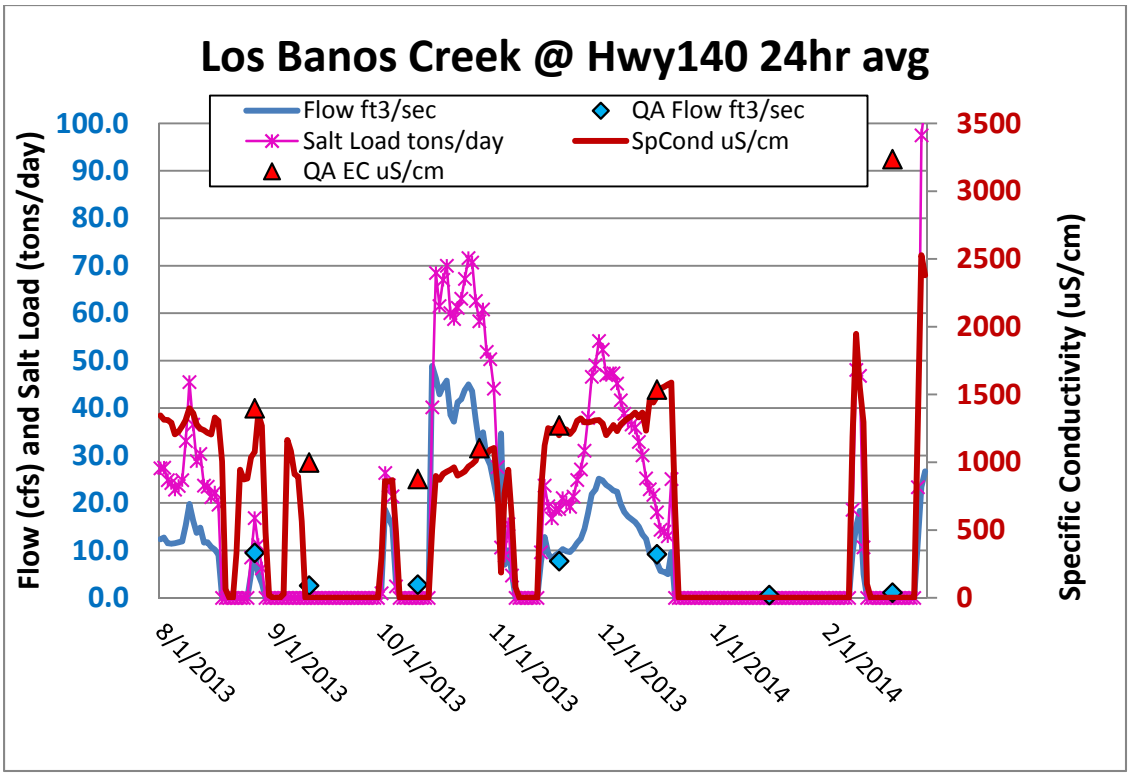


Figure 5. Los Banos Creek average daily flow (cfs), EC (uS/cm), and calculated salt load with QA.

Fremont Canal at Gun Club Road

The YSI Sonde and Sontek SL have been sending constant and reliable data since deployment. Regular QA/QC continued through the entire reporting September 1, 2013 to February 28, 2014.

Table 5. Fremont Canal @ Gun Club Road Quality Assurance.

Fremont Canal DATE	TIME	EC (uS/cm)	pH (#)	Stage (ft)	Velocity (ft/sec)	Flor (ft3/sec)
8/7/2013	9:52	0	0.00	0.00	0.00	0.00
9/9/2013	10:24	873	7.44	0.50	0.36	1.17
10/10/2013	11:48	1024	7.84	2.40	-0.01	-0.25
11/14/2013	13:18	1236	7.67	2.50	0.05	1.50
12/12/2013	12:44	1197	8.19	2.70	0.29	9.64
1/13/2014	9:28	1442	7.23	2.00	0.14	2.99
2/12/2014	11:55	1398	7.87	2.20	0.39	8.96

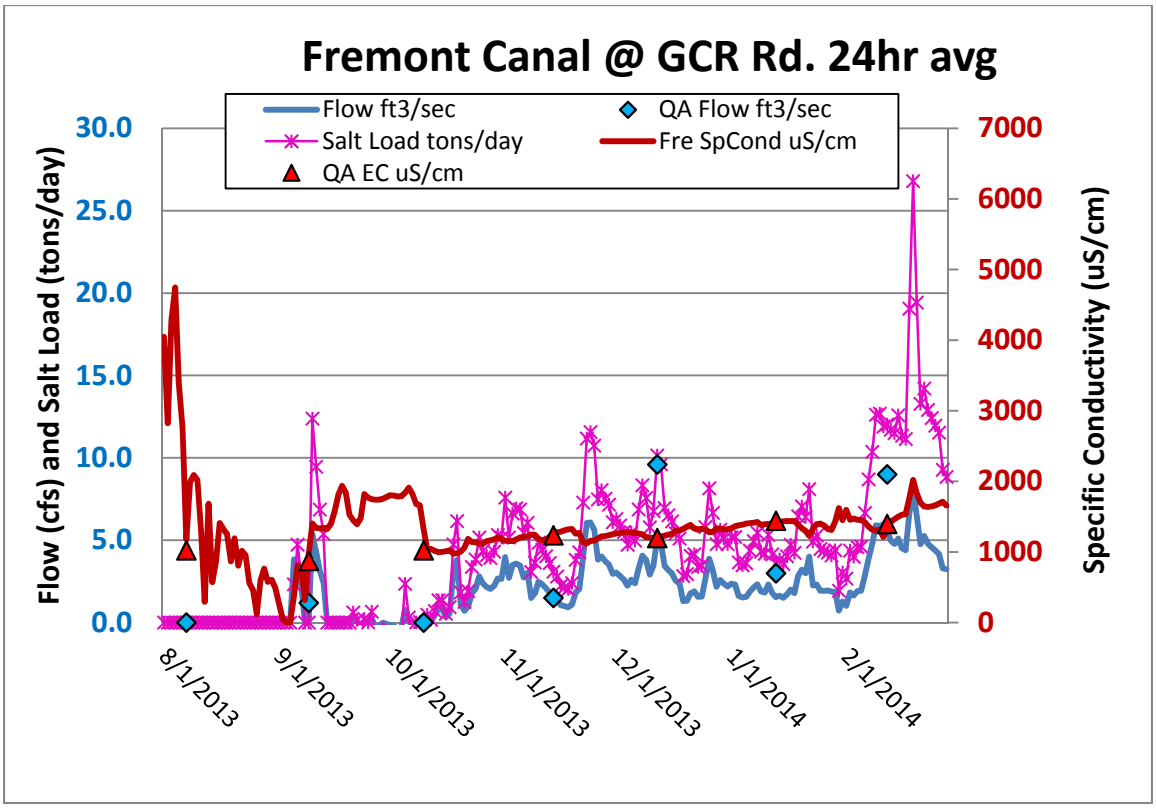


Figure 6. Fremont Canal @ Gun Club Road average daily flow (cfs), EC (uS/cm), and calculated with QA.

Mud Slough at Gun Club Road

The YSI Sonde and Sontek SL have been sending constant and reliable data since deployment. Regular QA/QC continued through the entire reporting September 1, 2013 to February 28, 2014.

Table 6. Mud Slough @ Gun Club Road Quality Assurance.

Mud Slough @ Gund Club Road						
DATE	TIME	EC (uS/cm)	pH (#)	Stage (ft)	Velocity (ft/sec)	Flow (ft3/sec)
8/7/2013	9:52	0	0.00	0.00	0.00	0.00
9/9/2013	10:24	1242	7.48	1.20	0.12	2.07
10/10/2013	11:48	1216	7.68	3.10	0.26	20.05
11/14/2013	14:10	1654	7.95	3.20	0.28	21.98
12/12/2013	12:44	1943	7.89	3.40	0.23	18.84
1/13/2014	9:28	2474	7.27	2.75	0.21	14.26
2/12/2014	11:55	2770	7.76	2.80	0.30	18.23
3/13/2014	11:24	2648	7.92	2.40	0.22	11.65

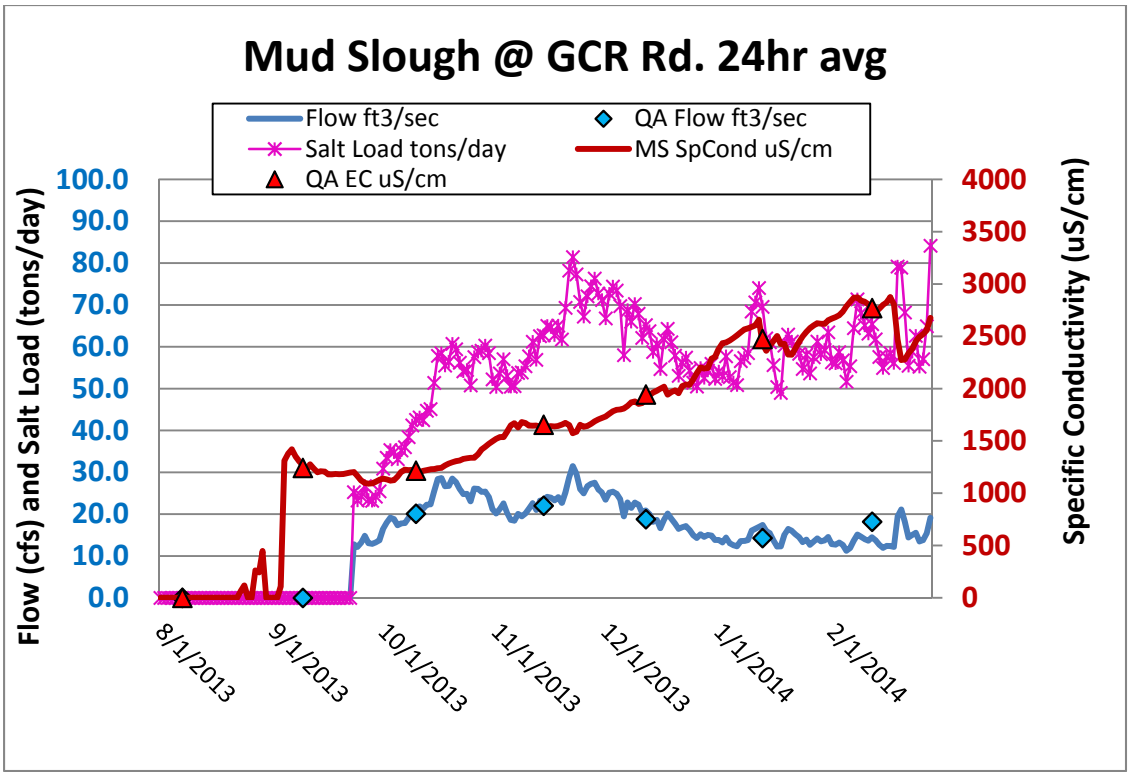


Figure 7. Mud Slough @ Gun Club Road average daily flow (cfs) EC (uS/cm), and calculated salt load with QA.